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1 IN THE SUPERIOR COURT OF THE STATE OF WASHINGTON
     IN AND FOR KING COUNTY
 STATE OF WASHINGTON, ) No. 96-2-15056
SEA
   Plaintiff, )
    )
    vs. )
 6 )
 AMERICAN TOBACCO CO.; BROWN & )
 7 WILLIAMSON TOBACCO CORP.;
LIGGETT )
& MYERS, INC.; LORILLARD
TOBACCO )
8 CO., INC.; PHILIP MORRIS,
INC.; )
R.J. REYNOLDS TOBACCO
CO.; B.A.T. )
9 INDUSTRIES, P.L.C.; HILL
& )
KNOWLTON, INC.; THE
COUNCIL FOR )
10 TOBACCO RESEARCH-U.S.A.,
INC.; )
TOBACCO INSTITUTE, INC.;
foreign )
11 corporations; and unknown
corpor- )
corporations; and JOHN
DOE 1 - 100,) 12 and JANE
DOE 1 - 100, individuals, )
     ) 13 Defendants. )
   ____) 14
   TRANSCRIPT OF
PROCEEDINGS
15
 taken before the HONORABLE
GEORGE A. FINKLE, Judge, 16
 at the King County Courthouse,
Seattle, Washington, 17
 beginning at 9:05 a.m.,
Thursday, November 12, 1998. 18
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20
22 REPORTED BY: Barry Fanning,
RPR
    James D.
Lavielle, RPR
23 Official Court
Reporter
    State of
Washington
24
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05622
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05625
                       INDEX
1
 2 Witness Name
                           D C
RD RC
3 Lawrence Meyer
                                5626
5821 5854
4
5
                     EXHIBITS
6
7 Exhibit No.
                      Marked
Admitted
8 No exhibits marked/admitted
9
05626
      Seattle, Washington,
11/12/98, 9:05 a.m.
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THE COURT: Please sit
 2
down.
 3
         CROSS-EXAMINATION (Cont.)
   BY MR. WEBB:
 5 Q Mr. Meyer, I'll pick up where we
left off at
 6 the time of our Tuesday recess at the end
of the day.
 7 I actually had written -- I was asking
questions about
 8 what the actual patent technology was of
9 cigarette and whether or not in fact it was
a safer
10 cigarette. We were starting to get into
that subject
11 matter and I had -- we were just
explaining to the
12 jury I think at the time of recess we had
shown them
13 the patent, remember, the patent that
Liggett got on
14 this technology set forth that it was
patented as a
15 unique technology that used a combination
of palladium
16 and nitrates to lower what is known as PAH
or PCAH
17 levels in cigarette smoke.
18
    Is that correct?
19 A Yes.
20 Q And I wrote this out because --
and I think
21 you agreed with me that in some of the
Liggett
22 documents these are known as polycyclic
23 hydrocarbons, sometimes PAH, sometimes the
patent uses
24 the term PCAH, is that correct?
25 A That is my understanding.
05627
1 Q Your understanding is those are
the same
 2 things?
 3 A Yes.
 4 Q The materials that were put
together that
 5 were going to be given to the Federal Trade
Commission
 6 that -- remember you told us last week that
you
 7 received a group of materials that were
going to be
8 submitted to the Federal Trade Commission
by you in
 9 order to educate the Federal Trade
Commission on what
10 this XA technology was about, is that
correct?
11 A Yes.
12 Q This was marked as Exhibit 6461.
Let me get
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13 you a copy of it and I'll show the jury. This was 14 marked by Mr. Ferguson 6461, I have a copy here that I 15 have to find things pretty easily. I'll hand you 16 6461. 17 Am I correct that your recollection is that 18 when that material was put together to eventually go 19 to the members of the -- commissioners of the Federal 20 Trade Commission, that material set forth that the 21 technology that was invented and that this 22 cigarette represented was the reduction of PAHs in the 23 cigarette smoke, is that correct? 24 A Yes. 25 Q Let's show the jury an example of that. Turn 05628 1 to tab 2E in 6461, this book that was put 2 go to the FTC, this is tab 2E -- back up here a little 3 bit -- this actually is a scientific paper that was 4 included in the material -- strike that, I don't want 5 to call this a scientific paper. This was a document prepared by the Arthur D. 7 Little Company, is that correct? A I think with some input from the research 9 fellows at Liggett, but I believe that's Q This was -- it appears that this was a 11 combination of a -- put together by Liggett as well as 12 people at Arthur D. Little, is that correct? 13 A Yes. 14 Q Arthur D. Little is a research company that 15 was working with Liggett in developing the XΑ 16 technology, is that correct? 17 A Yes. 18 Q And if we look at the -- and this is in the 19 book that was going to go to the Federal Trade 20 Commission? 21 A Yes. Q If we look at this, this is an abstract which 23 summarizes -- I'll not go through this whole thing --

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24 but this abstract right on the first page
of the
25 document that was going to the Federal
Trade
05629
1 Commission says the carcinogenicity of
cigarette smoke
 2 condensate, CSC, toward mouse skin has been
 3 dramatically reduced by 77 to 100 percent
through a
 4 combination of palladium metal catalyst
with blends
 5 high in Burley tobacco content or with
lower Burley
 6 tobacco blends supplemented by the
addition of
7 compensating amounts of a nitrate salt.
    This lowering of carcinogenicity
8
 9 associated with decreases in the level of
polycyclic
10 aromatic hydrocarbons, PAHs, in smoke
condensate.
11
    See that?
12 A Yes.
13 Q What that clearly sets forth is
this XA
14 technology lowered tumors in mice and
that resulted
15 because of these lower PAHs?
16 A Yes.
17 Q This issue of whether or not this
18 fact actually lowered PAH, I'll ask this -
- strike
19 that question.
    Your goal in giving this document
to the
21 Federal Trade Commission, this compendium -
- strike
22 the question.
   What we're calling 6461 is
actually a group
24 of many different documents pulled together
to give
25 the FTC a good overview of what this
technology was
05630
1 all about.
   Is that fair to say?
 3 A Yes.
 4 Q This is not really one document,
this is a
 5 number of documents that were pulled
together into one
6 big document that you could hand to the
FTC, is that
 7 correct?
 8 A Yes.
 9 Q Now in fact you told us you had at
one time
10 maybe 15 or 20 copies of this document?
11 A At least.
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12 Q So the jury understands -- let me ask this 13 question. 14 Your goal as the lawyer for Liggett was to 15 eventually convince the Federal Trade Commission to 16 let Liggett market this product, is that correct? 17 A Yes. 18 Q And you believed, I take it, that everything 19 set forth in this material, in this book, 6461, that 20 was given to you by Liggett, you believed it was 21 accurate and correct, did you not? 22 A Yes, and on both sides of the issue to some 23 extent. 24 Q You did not believe there was anything in 25 here that was misleading, did you? 05631 1 A My belief was that this was a fair starting 2 point for the dialogue between the commission, the 3 company, and those who would be called in to comment 4 by the commission. 5 Q I take it as a lawyer for Liggett 6 least did not believe there was anything misleading in 7 this document? 8 A At the time, I certainly didn't. 9 Q In fairness, I want to make sure this is 10 clear. These materials were actually pulled together 11 for you by representatives of your client, is that 12 correct? 13 A Yes. 14 Q Show the jury that so that it's clear that 15 you didn't actually go out and gather the materials, 16 because you were not a scientist or expert on the 17 underlying technology. 18 Is that fair to say? 19 A Yes. 20 Q Lawyers who represent clients accept 21 information that our clients give us, is that correct? 22 A Most of the time. 23 Q To the extent we can check it out, we try 24 to do so but in this case you had -strike that.

25 Am I correct you accepted the materials given 05632 1 to you by your client that were put into this book to 2 give to the Federal Trade Commission, you accepted 3 that as a fair and accurate representation 4 technology of this product, is that correct? 5 A Yes. 6 Q And the first page says here that it was 7 prepared and edited for you by Dr. J. D. Mold, Dr. H. 8 G. Bryant and J. D. Roth, Junior, Esquire. 9 Right? 10 A Right. 11 Q Mr. Roth was a patent lawyer at Liggett, 12 right? 13 A Right. 14 Q He was someone knowledgeable about the 15 product, XA technology? 16 A Yes. 17 Q Much more than you were? 18 A Yes. 19 Q Mr. Mold, you said, was head of the research 20 and development department at Liggett? 21 A That is -- my recollection is that he was the 22 number one guy in that research and development group. 23 Q You were aware Dr. Mold was heavily involved 24 in the development of the XA product, is that correct? 25 A That was my understanding. 05633 1 Q Who is Dr. H. G. Bryant? 2 A I didn't know him well, he was Butch Bryant 3 to me. He worked for Dr. Mold. 4 Q Although you did not -- well, once this was 5 given to you, you were the one that was going to take 6 it to the FTC and use it as a lawyer to convince the 7 FTC that they should eventually approve marketing this 8 product to the public in the United States? 9 A That was certainly the goal. What I was going to do with it, 10 and want to 11 emphasize this, I was going to start the dialogue. 12 hopefully I said Tuesday, I guess I've been consistent in 13 this, this is how we would start the dialogue.

14 When you say convince, I want to be fair, I'm 15 not sure that this document would have convinced them 16 but it would have started the dialogue. 17 Q Would it -- well, this document, which is 18 what, three inches thick, quite a bit of the material 19 you were hopeful this would begin the process to 20 ultimately lead to your success in convincing the 21 commission to allow this product to be marketed in the 22 United States. 23 Is that fair to say? 24 A Yes. 25 O Now in fact -- well, approximately when did 05634 1 this document, in the form we have it here in the 2 courtroom now, when did you actually have this 3 document to take to the FTC, if you wanted to? 4 A I think we talked about fall, I think it was 5 fall of '78. 6 Q I think that's what you told me last week. 7 There is no date on the document, is that correct? 8 A For some reason there was a cover letter, I 9 don't know whether the cover letter came with it or 10 not, struck me it was October 1978 cover 11 Q And at that time your job you had been 12 retained or requested by your client Liggett to begin 13 to have informal contact with certain representatives 14 of the Federal Trade Commission that you had knowledge 15 about or relationships with, is that correct? 16 A Yes. 17 Q And as a matter of fact, am I correct that in 18 the fall of 1978, moving toward throughout the fall 19 and into the end of year of 1978, you were actually 20 having, I think what you called -- you told Mr. 21 Ferguson were informal contacts with people 22 Federal Trade Commission that you knew, is that

- 23 correct?
- 24 A Yes.
- ${\tt 25}$  Q And you were trying to get them

excited or

05635

- 1 interested in this technology, is that correct?
- $2\,$  A I wanted to prime the pump, as they say, I
- 3 wanted them looking for me to come back with something
- 4 that would be of interest. That was the nature of
  - 5 those discussions.
- 6 Q During that time period when you were having
- 7 these informal contacts with the Federal Trade
- $\ensuremath{8}$  Commission, do you recall some occasions when  $\ensuremath{\text{Mr}}\xspace.$
- 9 Greer, the general counsel of Liggett, the person you
- 10 told us became your friend, when Mr. Greer would
- 11 periodically tell you that there were actually
- 12 scientists inside the company that had been working on
- 13 this XA project that were now raising real issues as
- 14 to whether or not some of the things that Liggett
- 15 wanted to claim about this product as being unique in
- 16 fact were not unique?
- 17 MR. FERGUSON: Objection,

foundation.

- 18 THE COURT: Overruled.
- 19 THE WITNESS: Yes.
- 20 BY MR. WEBB:
- 21  $\,$  Q And when Mr. Greer told you that there now
- 22 were some scientists inside the company that were
- 23 questioning whether or not this product was really
- 24 what it was patented to be, did he tell you that what
- 25 the scientists were raising is a concern that in fact 05636
- 1 this product, as it turned out, did not even reduce
- 2 the PAHs any lower than other cigarettes already being
- 3 sold in the marketplace in the United States?
- 4 A I recall one scientists of that view, there
- 5 may have been more, but certainly I recall at the time  $\,$
- ${\bf 6}$  that and Mr. Greer seized on this because Mr. Greer

7 was looking for, if you will, the negative as well as 8 the positive, certainly someone, I can't remember 9 whether it was Vello Norman or Bryant, but one of them 10 were -- had become fearful that your premises, that in 11 fact the cigarette didn't reduce PCHs any more than 12 other cigarettes was a problem. 13 Q Am I correct, now we're here today in 1998, 14 obviously 20 years later, right? 15 A Almost perfectly. 16 Q 20 years later in this courtroom you have 17 recently, just recently seen a document that you had 18 not seen back at the time period, written by a 19 scientist in Liggett that clearly sets forth this 20 concern that the PAHs in this product were not what 21 they were cracked up to be. In other words, they were not lowering the 23 PAHs any lower than other filtered cigarettes already 24 in the marketplace, is that correct? 25 A I recall during my deposition seeing that, 05637 1 I'll accept your premise, I don't remember it as 2 precisely as you phrased the question. I wouldn't 3 want to be misleading, but I agree that that is a 4 document that I looked at during my deposition. 5 Q Show the jury what we're talking about. If I 6 ask you something you are not sure of, tell me and 7 I'll make sure I try to show you to document. I'll hand to you what is in evidence, a 9 document I think you were talking -- you were shown in 10 your recent -- you were -- so the jury 11 understands, you just gave recent deposition testimony 12 under oath before the trial started in September of 13 this year, 1998, is that correct? 14 A Yes. 15 Q Am I right, September 8, 9, 10, first part of 16 September? 17 A Right after Labor Day.

18 Q You were shown documents in your deposition 19 that had been produced in this litigation by your 20 client Liggett, is that correct? 21 A In part, yes. 22 Q Let me show you what I've marked as State's 23 Exhibit 6052 in evidence, and I'll show the jury the 24 document that I think both you and I are talking about 25 that deals with this problem with the PAHs. 05638 1 MR. FERGUSON: I'm not certain this has been 2 admitted. I'll object until we can check 3 MR. WEBB: Let Mr. Ferguson check that. THE COURT: We show it as 4 admitted. 5 MR. FERGUSON: Not on my copy of the order. 6 THE COURT: On October 12, I think. 7 BY MR. WEBB: 8 Q I'm showing just the jury this is a document 9 that, so the jury understands, has a number which we 10 call the Bates stamp numbers. 11 Do you know what that is? 12 A Yes. 13 Q LG means this was produced in this litigation 14 by Liggett, does not surprise you, does it? 15 A Looks like Liggett group. 16 Q Common practice when companies produce 17 documents in litigation they stamp the pages so we 18 show what company they came from, right? 19 A Right. 20 Q And this document, if we look at it we can 21 tell this document, the beginning of it is talking 22 about -- the first page of this document is talking 23 about presenting a paper at the 12th International 24 Cancer Congress. 25 See that? 05639 1 A Yes. 2 Q And in fact actually Liggett did 3 paper on the XA technology to the 12th International 4 Cancer Congress and it was included in the materials, 5 this Exhibit 6461, that was going to be

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given to the
 6 FTC, is that correct?
 7 A Right.
 8 Q This document is talking about
presenting
 9 a paper at that conference, talking about
also
10 publishing papers in preventative
medicine.
11
   See that?
12 A Yes.
13 Q Is that another scientific
publication?
14 A Yes.
15 Q It's talking about press
coverage, popular
16 articles, discussing questions of PCAHs
and mouse
17 tin -- I think that is a typo -- results,
interviews,
18 talk shows, discuss inventions,
advertising copy, no
19 claims in advertising with respect to PCAH
or mouse
20 skin painting except in the form of
disclosure, i.e.,
21 see what it sets forth there?
22 A Yes.
23 Q I'm not interested in the first
page, this is
24 clearly a document related to the XA
project.
25
   Fair to say?
05640
1 A No question.
 2 Q If we go into this document, try
to show the
 3 jury who prepared this document if we can.
Am I
 4 correct that you, while you were doing work
for -- I'm
 5 going to focus you on these initials at the
bottom, go
 6 to the page Bates stamped last three
numbers are 791.
7
   Are you with me?
 8 A Yes.
 9 Q Am I correct that while you were
working on
10 the XA project there was a scientist by the
name of
11 Dr. Andy I believe his name is spelled K A
LLIAMO
12 S, pronouncing that Kalliamos.
   Does that name ring a bell?
14 A It doesn't, but that's 20 years
ago. I may
15 have known of him, it really does not ring
a bell.
16 MR. FERGUSON: I think it's N O S.
17 MR. WEBB: KALLINOS?
18 MR. FERGUSON: Yes.
19
    MR. WEBB: I stand corrected.
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20
     THE WITNESS: With that correction,
it
21 doesn't ring a bell.
22 BY MR. WEBB:
23 Q Look at the initials there, maybe.
Does it
24 appear to you, as you look do you have a --
look at
25 the copy you have there, look down at those
initials.
05641
    Does it appear to you that that
appears to be
 2 the initials AGK, if you can tell?
 3 A I would have said ATK, it's either
AG or ATK.
 4 Q Show you another page of the
document. Go in
 5 a few more pages.
 6 A Next page, same initials.
 7 Q Next page has the same initials?
 8 A Same initials.
 9 Q Same initials, then there's a page
at the top
10 where if you look really carefully, does it
look like
11 that appears to be Mr. Kallianos's last
name?
    Can you make that out?
13 A If we accept the premises that he
worked
14 there and that's how you spell his name,
that would
15 not be an unfair interpolation of that
scribble.
16 Q We know this document is a
Liggett document,
17 appears to be prepared by some Liggett
scientist.
18 Fair to say?
19 A Certainly appears to be the case.
20 Q Look at this page here that I've
put on the
21 screen. See what this Liggett scientist,
whoever it
22 is, says about this PAH issue?
    This page says, it is my feeling
that we
24 should publish only one paper in the J of
Preventative
25 Medicine at this time. That paper should
deal with
05642
1 the reduction of tumorigenic activity of
cigarette
 2 smoke. This in essence is the message of
the second
 3 paper which, with only minor
modifications, would
 4 serve the purpose admirably.
 5 This is the part I want to call
to your
 6 attention.
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7 In publishing the first paper, the scientist 8 says, we can get ourselves in a box firstly by 9 emphasizing PAH reductions. We are obligated to show 10 that, one, PAHs are important and responsible for 11 biological activity, two, that substituted are more 12 important, and three, that we reduce the level by only 13 about 50 percent for a particular blend, but the 14 absolute level of PAH for treated product is no 15 different than commercial filter cigarettes. 16 I want to stop there and ask about that 17 sentence. 18 When this Liggett scientist talks about the 19 level of PAH per treated product, that's referring to 20 the XA product treated with the nitrate and palladium, 21 is that correct? 2.2 A Yes. Q And so this scientist at Liggett is saying 24 right here very clearly that the level of PAH for the 25 palladium XA cigarette is no different than commercial 05643 1 filter cigarettes? 2 A That's right. 3 Q Now, that's my X, by the way, I put that X on 4 there because of this document. I want to ask you whether -- am I correct 6 that while you were working on this project 7 planning to go to the FTC, am I correct that nobody at 8 Liggett ever told you that the levels of PAHs for the 9 palladium cigarette were no different than the level 10 of PAHs in commercial cigarettes already on the 11 market? 12 A I have to answer that question this way, if I 13 might. The reason why, when I gave you the ad that 14 had been approved, that I'd approved, that Don Cohn 15 had approved, you will recall that the language that I 16 had in that ad had nothing to do with PAHs

or PCAHs, 17 because at some point obviously there was an issue 18 raised not that different than what is being expressed 19 here, but not quite that flatly, if I recall, and 20 quite frankly, I was always of the view that we 21 couldn't raise that kind of issue properly anyway in 22 advertisements for this product. The only thing we 23 could come close to possibly were some of the results 24 that even this scientist recommended we stick with, 25 that is the reduction of tumors, so there was a 05644 1 dialogue about this kind of issue. 2 One of the things that I tried to make clear 3 was what we had hoped would come from this was a 4 better understanding of this patented process and what 5 worked and what didn't. 6 The hard thing for anyone to deny was the 7 reduction in tumors. It's fair to say what I recall 8 most vividly, even though they talk about it being the 9 PAHs or PCAHs, nobody knew what was going on. Even 10 Kensler admitted to me he didn't know what was going 11 on. 12 Q Am I correct that based on your discussions 13 with the Liggett scientists and representatives, as 14 you were getting prepared to go meet with the FTC, and 15 as you were having your informal dialogue with some of 16 the members, am I correct it was your understanding 17 that the cigarette did exactly what the patent said, 18 that it lowered the XA -- that the XA cigarette 19 lowered the PAHs significantly lower than commercial 20 cigarettes. 21 Was that your understanding? 22 MR. FERGUSON: Objection, asked and answered. 23 THE COURT: Overruled. 24 THE WITNESS: That was my

understanding at

http://legacy.library.ucsf@du/tid/edp65a00/pdfidustrydocuments.ucsf.edu/docs/pqhd0001

25 that time, there's no question, and now we

start 05645 1 compressing 20 years, but at the time that's correct, 2 at the time, very time I went to the FTC that was my 3 understanding. BY MR. WEBB: 5 Q And this scientist goes on to say, after he 6 says it was no different -- and by the way, am I 7 correct this document, you don't recall ever seeing 8 this document back at the time that you were getting 9 ready to go to the FTC? 10 MR. FERGUSON: Objection, no foundation as to 11 the date of this document. I don't believe it was in 12 existence when the witness went to the FTC. 13 THE COURT: Overruled. 14 You may answer. 15 THE WITNESS: You are correct. I did not see 16 this document until it was shown to me during my 17 deposition, 20 years, maybe later than it was 18 prepared. 19 BY MR. WEBB: 20 Q And you notice he goes on to say this 21 document, after he talks about it doesn't lower PAHs 22 any different than commercial filter cigarettes. Goes 23 on to say, not only are we having to squirm 24 present weak and surreptitious arguments in our first 25 paper. 05646 Is that referring to this paper here, the 2 first paper, the one that was included in 3 materials to the FTC, the 12th International Cancer 4 Congress? See, it's listed as number one here. See that? 6 A I don't know the answer to that question, but 7 it could have been. 8 Q That was the paper -- that paper was included 9 in what went to the FTC? 10 A Sure was. 11 Q Says here not only are we having to squirm 12 and present weak and surreptitious

arguments in our 13 first paper, which may give us problems with the 14 research, but worse, even if we get the paper 15 accepted, it may haunt us down the way. 16 See that? 17 A Yes. 18 Q Did you ever have any indication to believe 19 that the documents that you -- the document that was 20 in this book to go to the FTC, which is the -- it's 21 2C, I believe you find it there, 2C in the 22 A I think 2C is the abstract. think the 23 document may very well be 2D. 24 Q You are correct, it's 2D. But so the jury knows, this paper 25 here is 05647 1 included in the materials that you were going to take 2 to the FTC? 3 A It is. 4 Q Did you ever have any reason to believe that 5 your client believed that it had to actually squirm 6 and present weak and surreptitious arguments in that 7 paper? 8 A No. 9 Q No one told you that? 10 A No. 11 Q No one hinted or suggested that to you? 12 A No. 13 Q If they had, would it cause you to pause and 14 hesitate before you gave it to the Federal Trade 15 Commission, is that fair? 16 A Absolutely. 17 Q Goes on to say here, competition -- that's 18 referring to other companies, is that correct? 19 A Yes. 20 Q -- competition can check PAH level with a day 21 or two of any -- with a day or two of any report it 22 will become apparent to them as soon as they see any 23 numbers that the leading commercial filter cigarette 24 gives essentially the same PAH content as the new 25 product. 05648

And it goes on to visualize something, right? 2 Says visualize, if you please, the PM 3 announcement --that's referring to Philip Morris, is 4 that correct? 5 A Yes. 6 Q He is speculating on what PM would do here? 7 A Yes. 8 Q He says PM will say Marlboro cigarettes 9 contain the same amount of PAH as the new 10 See that? 11 A Yes. 12 Q Tame was a new brand name that Liggett was 13 toying with to call this product, is that correct? 14 A That's my understanding. 15 Now I didn't think they had gone that far 16 with it, but you're right. 17 Q Results confirmed by NCI, that's the 18 National -- I'm not going to paraphrase it, 19 says results confirmed by NCI and Foster D. Schnell. 20 See that? 21 A Yes. 22 Q He is saying here as soon as we put this 23 product out people will check out the PAHs and find 24 out it's a fraud? 25 A That's what he is saying. 05649 1 Q And he says here that, due to the declining 2 sales, people will say Liggett is desperate and out of 3 its mind. He speculates RJR president Tich, T I C H, 4 confirmed the PM announcement and said their Winston 5 cigarette had the same content of PAH as the new 6 product. 7 See that? 8 Again he was speculating within a few days 9 Reynolds will show their product, as far as PAHs, is 10 just good as this cigarette, right? A That's what it says. 12 Q He goes on to say he has contacted Governor 13 Hunt of NC, North Carolina? 14 A Yes. 15 Q And Judge MacGruder of

Greensboro, North 16 Carolina, and have been given evidence that new 17 products has the same PAH content as regular filter 18 cigarettes, and then goes on to speculate Judge 19 MacGruder has issued an injunction against -- I'm 20 sorry, are you with me? 21 A Yes. 22 Q He goes on -- he's projecting in the future, 23 you understand, right? 24 A Yes. 25 Q He says Judge MacGrude has issued an 05650 1 injunction against Liggett & Myers restraining 2 distribution and sale of Tame, and Liggett is 3 appealing. 4 What the scientist is saying in this 5 document, is that this company, Liggett, patented this 6 product of lower PAHs, was telling the scientific 7 community that PAHs were lowering carcinogenicity, and 8 this scientist is saying, if we continue to say that, 9 it's a fraud. 10 That's what he is saying here, isn't he? 11 A That's not an unfair conclusion as to what he 12 is saying in the bulk of his memorandum. 13 Q And you certainly were not aware of that? 14 A Was not. 15 Q In fact, now that you have had time to think 16 -- by the way, I again want to say, you did not put 17 this document together, this 6461, is that correct? 18 A Did not. 19 Q Although now that you found out in your 20 deposition about this issue of PAHs, did you go back 21 and look at this document, 6461, to see if Liggett 22 actually structured this document that it gave to you 23 for you to give to the FTC, did you go back and see if 24 Liggett structured this document in a way to conceal 25 from the Federal Trade Commission this problem of the

## 05651 1 PAHs of this new product being no different than in 2 other commercial products already on the market? 3 A No. 4 Q Look at it together here with the jury. One of the documents in this 5 presentation you 6 were going to make to the FTC is the -- so you can 7 turn -- do you have the actual hard copy there? Turn 8 to what you have as tab 2E. This is the one we just 9 showed the jury a moment ago, we'll show the cover 10 page again. This is the document that was prepared by 11 Liggett and A. D. Little to describe this product. 12 Is that correct? 13 A Yes. 14 Q And this is the front page of that document. 15 Is that correct? 16 A Yes. 17 Q And this is in the book to go to the FTC, 18 this is in the book? 19 A Yes. 20 Q If you go -- we'll go by Bates stamp pages, 21 go in a way, go to Bates stamp page marked LGM00088, 22 see the Bates stamp page numbers? 23 A I got it. 24 Q See some bar charts there? 25 A Yes. 05652 1 Q What Liggett did, it provided to the FTC a 2 comparison of this new product -- I'm going to try to 3 focus this, I'm the worst in the world to use this, I 4 want you to know. 5 Focus the jury and you to the top of the page 6 as we go through this to answer my questions whether 7 or not Liggett intentionally deceived or was trying to 8 intentionally deceive the FTC with what they gave you. 9 If we look here, Liggett basically said -gave you to 10 give to the FTC these bar charts that would compare 11 the middle says the new P R D, product prototype. 12 See that?

```
13 A Yes.
14 Q Tell the jury -- that is the XA
cigarette, is
15 that correct?
16 A Yes.
17 Q And Liggett is comparing that to
top ten
18 brands of other commercial cigarettes in
1977.
19
    Is that correct?
20 A Yes.
21 Q And then they also compare it to
low tar
22 brands.
23
   Is that correct?
24 A Yes.
25 Q And what they do, and they
actually compared
05653
1 this, they showed this comparison of the XA
cigarette
 2 as to all different types of constituents
of cigarette
 3 smoke -- runs on for eight pages, count the
 4 runs on eight pages, compares its product
to
 5 nicotine-free dry smoke, nicotine, carbon
monoxide.
   See that?
 7
    First of all, count the pages -- I
should not
 8 ask you too many questions.
 9 A 7 or 8.
10 Q Show the jury an idea on the first
issue,
11 comparing, for example, their product to
various smoke
12 constituents, nicotine, carbon monoxide.
13
   See that?
14 A Right.
15
Q
Huh
?
16
Α
Yes
17 Q They go on to the next page,
compare the
18 levels of nitric oxide, hydrogen
cyanide, acrolein,
19 we can go on, we will together, phenols,
hydrogen
20 sulfide, catechol, acetaldehyde,
formaldehyde,
21 totealdehyde, ammonia, I'll spell this, H
CEPOMI
22 T R I L E, benzene?
23 A Pronounce the last one.
24 Q Nitrosamine, I think.
25 A Good.
```

## 1 Q My question is, there is one thing that is 2 interestingly absent, isn't there, sir? 3 A Yes. 4 Q Your client did not give the FTC a bar chart 5 to compare the PAH level of its cigarettes to the 6 other commercial cigarettes, did it? 7 A Not in this paper. 8 Q Do you find it anywhere in this? 9 A No. I'm saying not in this paper, in terms 10 of the other discussions about the patent and the 11 technology, there is some qualification. Now in fairness, what I will tell you is that 13 if this scientist, who I didn't know at the time and 14 don't know now, right, then I agree with all your 15 observations. I just can't agree that the PAHs and 16 the PCAHs are the same in traditional cigarettes as 17 they are in the XA cigarette, because I don't know the 18 answer to that one. That was something in my mind 19 always yet to be determined are the PCAHs and PAHs, 20 something different in the XA. 21 I didn't know the answer, and the people 22 I talked to didn't know the answer. In fairness, if 23 this fellow is right, then these people, 24 assembled group of papers were wrong. 25 Q Not only wrong, but you at least agree with 05655 1 me, by the way, a scientist at Liggett that 2 working on this project would know more than you about 3 the PAH level? 4 A I would hope so. Q You would expect that? 6 A Yes. 7 Q We saw what he said? 8 A Right. 9 Q And we also -- and by the way, this, since 10 this product was patented because it lowered the PAHs 11 wouldn't you think that's one thing that you would at 12 least make a comparison on when you give this to the 13 FTC?

14 A I think that's probably fair. 15 Q I don't think you ever realized this until 16 today, do you now agree with me that regardless of 17 whether it was higher or lower, you certainly 18 believed -- you would believe, would you not, that 19 your client would draw a bar chart that compared the 20 most significant part of the invention with other 21 commercial cigarettes? 22 A I agree with that. Let me say this, that 23 what I've tried to say in my testimony here is that I 24 felt that if they were going to promote 25 advertise this product at all, they were going to have 05656 1 to promote it, warts and all. One of the things I 2 focused on was the fact they were able to reduce the 3 tumorigenicity by a significant number, 88 percent, 4 and the cancerous tumors or carcinogenicity by 77 to 5 100 percent. 6 The problem associated with some of these 7 other scientific issues is this was a starting point, 8 and indeed if there was an issue that I didn't focus 9 on at the time about the PAHs or PACHs, and the 10 quality of that production that ought to have been 11 there, too. 12 In fairness, if this fellow is right, even 13 his emphasis basically what he says in this 14 memorandum, it's my feeling we should publish only one 15 paper and that paper should deal with the 16 reduction of tumorigenicity activity and that goes on 17 to talk about the PAHs, I wouldn't have gone along 18 with that, I wouldn't have gone along with emphasizing 19 the benefits and not the negatives, if there were 20 some, I just didn't know about the issue. 21 If it's a valid issue it was

a problem that

```
22 we were going to run into full bore.
23 Q I'd like to return to my
question, here is
24 the question.
25 You certainly would agree
with me that that
05657
 1 scientist knows more than you about
PAH levels?
 2 A I don't know him. I agree he
ought to.
 3 Q Number two, whether he is right
or wrong, you
 4 do agree that since the documents I just
showed you
 5 represented to the FTC that it was the
lowering of
 6 PAHs that was causing the lowering of
carcinogenicity,
 7 you, at least, would do a comparison of
PAHs, would
 8 you not?
 9 A You would think so.
10 Q And I know you didn't know this
until now, we
11 just went through all the constituents of
smoke.
12
    When your client put together the
bar chart
13 they excluded that?
14 A They certainly don't have it
here.
15 Q When we get a recess I'll give
you a chance
16 to look at the whole document. My
question I'll ask
17 you after a break is whether you find
anywhere in
18 there that your client disclosed to the
FTC anything
19 about a comparison of PAHs in regular
commercial
20 cigarettes versus the XA.
   Understand my question?
22 A I think the answer to that -- I
accept your
23 representation on that, the only
qualification I give
24 you is whether or not there is a
discussion in here,
25 and I quite frankly haven't looked at this
since
05658
 1 September 8, 9, 10, is whether there is
any
 2 representation in here about the quality
or the
 3 character of the PAHs, PCAHs somehow being
altered by
 4 the palladium nitrate condition. I don't
know the
 5 answer.
 6 Q I'm not a scientist, I don't want
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to mislead 7 you. Forget what I can find, you look at it in case 8 I'm wrong so? MR. FERGUSON: Objection, this is some kind 10 of a dialogue and not questions. THE COURT: Sustained. 12 BY MR. WEBB: 13 Q Now that you -- I think I covered it. I'll 14 make sure it's clear. 15 Those bar charts that we just showed the jury 16 that don't show PAH, you're aware -- did you ever ask 17 your client, do you have evidence that the PAHs in 18 this new cigarette are different than the PAHs in the 19 commercial cigarettes already on the market? Did you ask your client that? 20 21 A No, I did not. Remember, we're talking about 22 this dialogue today, this is an issue that truthfully 23 never surfaced at the time that this document was put 24 together and certainly in any informal discussions and 25 even after my informal discussions the first time we 1 started talking about this issue was September 8, 2 9, 10 of this year. 3 Q Now I'm showing to you, this is a book you 4 were going to give to the Federal Trade Commission? 5 A Yes, right. 6 Q Those bar charts that we just showed the 7 jury, they actually appear in this document that 8 starts off by explaining to the FTC what this product 9 is all about. I showed you a moment ago, we could 10 read it again, the first paragraph is telling the FTC 11 this product lowers carcinogenicity because of this 12 lower levels of PAHs? 13 A That's right. 14 Q And then they don't even include a comparison 15 of PAHs? 16 A In fairness go back to LGM documents 000 --17 one, two, three, four zeros 82 then follow back. As

18 you see there is a presentation on PAH concentrate and 19 control, PAH from the product -- PAH from cigarette 20 smoke condensate. 21 I'm the wrong person to take you through the 22 document, I gave up on math and physics in 1960 but 23 obviously my only qualification is I don't 24 whether these discussions about PAH help answer your 25 concerns or not because I'm not the scientist. 05660 1 Q Look at that page to start with, that is the 2 --3 A That's the first page then go to the next 4 couple of pages. 5 Q Go to any page you want. 6 A Go to the next one. 7 MR. FERGUSON: Give me the page number. 8 MR. WEBB: I believe he is on page LGM 83, is 9 that correct? THE WITNESS: That's right. 11 Q I put that up on the screen for the jury. 12 This says, figure 3, inspectors of PAH concentrate 13 from paralysis -- how do you pronounce that word? 14 pyrolysis, that means burning I'm told, and 15 cigarette smoke condensate see that? 16 A Some sort of infrared print taken from 17 scientific analysis of PAHs I don't know what this 18 chart means, I'm not the person to be able to rebut 19 the premises we're on. May mean something significant 20 here may not. Certainly is a new subject for me. 21 Q Who would be the person that could come in 22 and explain this to us? 23 A Only person I know would be either Dr. Mold, 24 Butch Bryant or Bowen Ross. 25 Q Or the scientist that presented the document? 05661 1 A The people at A. D. Little that prepared the 2 document. 3 Q The page you showed me and the jury, if we

4 read this, does not appear to be a comparison of the 5 pH levels of cigarette smoke in new product 6 other ten commercial products on the market, is that 7 correct? 8 A Yes. But then the next page talks about pH 9 concentrates from smoke of control cigarette pH 10 concentrates from the other cigarettes and I don't 11 know whether we're getting closer to the kind of thing 12 that should be in here and apparently are not as 13 apparently as the bar graphs or not all I'm saying is 14 in fairness I don't think I ought to be the guy who 15 says no the document was defective when in fact I 16 can't even analyze very properly some of these 17 additional charts. 18 Q This page here does not appear to be 19 comparing the XA cigarette with the other ten 20 commercial products? MR. FERGUSON: Object to the 21 predicate of the 22 questions, the examiner disagrees with the witness, 23 argumentative. 24 THE COURT: Hear the question again. 25 MR. WEBB: I'll rephrase it. 05662 1 Q The page we showed the jury LGM00084 if we 2 read the English language this does not appear to be 3 comparing the XA cigarette pH level with say the other 4 top ten filtered cigarettes on the market does it? 5 A May be worse than your suggesting because if 6 you look at the bottom the page says mass 7 spectroanalysis of pH concentrate from control 8 cigarettes which I assume are the nontreated 9 cigarettes and from cigarettes treated with palladium 10 and magnesium nitrate and in fact I suspect

11 overlay these somehow I do get comparison,

12 I overlay these things I do get something

if I

maybe when

that shows

http://legacy.library.ucsf&du/tid/edp65á00/pdfdustrydocuments.ucsf.edu/docs/pghd0001

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13 me the PAH is basically the same in the XA
cigarette
14 as it is in the non-XA cigarette.
   I don't know the answer to that,
all I'm
16 saying is I'm not the guy to talk about
this. I can
17 only talk about what was said to me at the
time which
18 I've already testified to.
19 Q I'll end this line of questioning
but you
20 don't need to be a scientist to at least
understand as
21 you look at these bar charts that you do
agree that
22 your client should have included a bar
chart that
23 compared the PAH levels, do you not?
24 A Based on this discussion I would
like to see
25 the same bar chart presentation for PAH or
PCHs also
05663
1 presented here.
 2 Q Thank you.
 3
    And it's not there?
 4 A No.
   Q Now, am I correct you actually --
what makes
 6 it worse that you -- in fact, I think you
said this a
 7 moment ago you became aware while you were
working
 8 this XA product that your client Liggett
was actually
 9 drafting ads to promote this product that
actually
10 hyped the PAH levels, the lowering, is that
correct?
11 A They were drafted, they never were
approved.
12 Q I understand you didn't approve
them, I'm not
13 casting any blame on you at all.
    So the jury understands you saw
14
ads that were
15 drafted by the advertising and marketing
department at
16 Liggett that was proposing that if we get
17 market with this product, one the things
we'll tell
18 the consumers is about the lowering of
these PAHs, is
19 that correct?
20 A That was certainly -- I don't know
whether or
21 not they did that in-house or Norman,
Craig, Kummell or
22 elsewhere but that were certainly ad copies
they
23 proposed.
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24 Q I'll find that, just a second here. 25 MR. FERGUSON: 6340. 05664 1 MR. WEBB: Thank you. 2 Q I think I have an extra copy here, too. 3 Maybe you can see these on the screen. If 4 you have a problem --5 A I've seen those recently. I saw those 6 Tuesday, I think. Q I'll show the jury because they 7 haven't. 8 What I'm showing is now a part -- so the iurv 9 understands there is an exhibit marked State's Exhibit 10 6340 which has -- which I'll hand you now which has a 11 lot of sample ads that represent how Liggett at least 12 was proposing that they would advertise this new 13 product if it got into the market, is that correct? 14 A How it was being suggested to Liggett by the 15 advertising agency that they advertise the product. 16 Q Liggett has an advertising and marketing 17 department, is that correct? 18 A Right, but in those days I have trouble 19 knowing whether or not it was just a few people 20 working for like Seidensticker, something like that, 21 it wasn't a big operation. Talking about the exhibits, it's 22 my 23 understanding about these tear sheets and others that 24 they all came initially from NCK or Norman Craig, the 25 advertising agency. These were not generated 05665 1 in-house, these may have been generated inhouse, I 2 don't know. 3 Q You're aware when Liggett hires an 4 advertising company to try to develop ads for it, the 5 only way the advertising company knows how to draft 6 the ads is to get concepts from Liggett, is that 7 correct? 8 A Concepts and underlying materials. 9 Q Otherwise they wouldn't know what

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to draft in
10 the ads, would they?
11 A That's right.
12 Q Look at a couple of these.
was one of
13 the proposed ads that Liggett was
proposing back at
14 this time.
15
    Take a full scope of it then go
in.
16
    MR. FERGUSON: Excuse me, Your
Honor. The
17 witness testified 3 times these came from
18 advertising agency and Mr. Webb started
out by saying
19 this is one of the proposed ads.
20 THE COURT: Sustained.
21 MR. WEBB: Strike the question.
22 Q This is an ad, as far as you know,
came from
23 the advertising agency working with
Liggett?
24 A That is my understanding.
25 Q Go to the heading up here, this
proposal. If
05666
1 we talk about the 1955 we had the first
anticavity
 2 toothpaste, in 1964 we had the first low
cholesterol
 3 margarine I think that is and in 1978 we
had the first
 4 low PCAH cigarette.
   See that?
 5
 6 A Yes.
   Q If it turned out, by the way, that
the level of
 8 PCAH was no different than other commercial
cigarettes
9 this would be misleading?
10 A This ad is terrible in all kinds of
reasons
11 but that would have been true, too.
12 Q There are others like this, are
there not?
13 A There are others that are even
14 Q Now let me leave behind PAHs.
15 A Good.
16 Q Talk about palladium, palladium is
one of the
17 chemicals -- strike that.
18
   Palladium is one of the constituents
that
19 Liggett was adding to the tobacco or
straying it on
20 the tobacco as part of the XA technology,
is that
21 correct?
22 A Yes.
23 Q And you notice that palladium is a
heavy
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24 metal that is actually extracted from
platinum, is
25 that correct?
05667
1 A I think that's right.
 2 Q We find it used, for example, in
industries
 3 such as the jewelry industry is one, is
that correct?
 4 A Yes.
 5 Q You are also aware that palladium
is toxic to
 6 humans, is that correct?
 7 A Yes.
   Q And you are aware that palladium
has been
9 identified by the scientific community as
10 carcinogenic, meaning that it can cause
cancer in
11 humans, is that correct?
12 A Yes.
13 Q And you're aware and were aware
back in 1978
14 and '9 that there were people in the public
health
15 community that believe that you simply
don't add a
16 toxic chemical to cigarettes when that
chemical is a
17 carcinogen, were you aware of that view?
18 A I think so, yes.
19 Q Common sense tells you that if you
20 cigarette product that is viewed already by
the public
21 health community as having major health
problems, if
22 you decide to take that product that
already has
23 problems and put another product that is
toxic and
24 causes cancer, that would cause people to
pause and
25 hesitate, wouldn't it?
05668
 1 A Certainly gave me pause.
 2 Q You actually advised Liggett
that as far as
 3 using this heavy metal palladium that
Liggett had to
 4 be careful with this XA project because
it could be
 5 alleged that the XA was more dangerous
than other
 6 commercial cigarettes because of
unforeseen
 7 consequences from the addition of
palladium.
   Did you tell Liggett that?
 9 A You are probably reading what I
said but I
10 certainly said that repeatedly, yes, I
felt that very
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11 strongly.
12 Q And so the jury understands the
problem was
13 that because palladium is toxic and causes
cancer, one
14 of the problems that Liggett tried to deal
with was to
15 be sure that the added palladium, this
thing they
16 added in, palladium into the tobacco
spraying it on,
17 that it did not seep, transfer into the
smoke that
18 smokers inhale into their lungs, is that
correct?
19 A That's probably a fair way of
saying it, yes.
20 Q In fact, I think you told us on
Tuesday that
21 Liggett added about one ounce of palladium
to every
22 cigarette?
23 A I'm obviously way off on that but
the fact is
24 whatever they added, whatever they added I
think the
25 number was -- we're talking about millions
of parts,
05669
 1 it was sprayed on.
   Let me say this, when I started
raising the
 3 very issue you are talking about, without
anything
 4 else having been said they assured me that
there would
 5 be absolutely no difference in the
palladium treated
 6 cigarette and regular cigarettes in terms
of palladium
7 residual.
    I didn't believe it. I said we
needed to
 9 test it, we couldn't possibly go on that,
and that's
10 the starting of all of testing done by A.
D. Little
11 and the Southwest Institute.
12
     Don't hold me, if I said an ounce
per
13 cigarette obviously it's a great mistake
certainly it
14 was just minute parts per million of
palladium for the
15 process, but that didn't matter, we're
talking about
16 adding a toxic metal. We have the same
concerns
17 whether adding a little or a lot.
18 Q Fine. Correct the answer, I
accept that, no
19 problem.
20 Here is the question: Whatever
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amount of 21 palladium they were adding, you were concerned that it 22 could be a problem? 23 A I felt that very strongly. 24 Q Did you ask them have you already done 25 testing before you asked me to go to the FTC, Mr. Meyer, 05670 1 before you ask me to go to the FTC have you, Liggett, 2 done new testing to see if in fact that palladium is 3 seeping into or transferring into the smoke that is 4 being inhaled or would be inhaled into people's lungs? 5 A If they had done any testing, it wasn't 6 persuasive. I think when I started raising these 7 issues is when they started doing the inhalation tests 8 we're talking about. 9 Q Do you know whether they had done any 10 testing as of the time that you began to represent 11 Liggett on this XA project had they already done 12 testing to find out one way or the other whether the 13 palladium in fact transferred into the smoke or 14 whether in fact it didn't transfer into the smoke 15 during burning of the cigarette? 16 A Actually I don't think so but I don't 17 remember. I don't think they had. 19 Q Let me show you, I'll hand you exhibit in 20 evidence marked 6053, State's Exhibit. Yes, State's 21 Exhibit 6053. Put it on the screen for the jury. This is a letter to a Dr. Paul Palm head 23 toxicology laboratory in Cambridge, Massachusetts. 24 See that? 25 A Yes. 05671 1 Q The letter is from the gentleman James D. 2 Mold, his title here is assistant director. See that? 3 4 A Yes, in '75. 5 Q You think he became the director later, you

6 are not sure, I understand that, is that correct, 7 you're not sure? 8 A Yes. 9 Q He clearly was a major participant in this XA 10 project on behalf of Liggett as a research scientist, 11 is that correct? 12 A Yes. 13 Q Is he the research scientist you had the most 14 contact with as far as the XA project was concerned? 15 A Yes. 16 Q He says Dear Paul, we have completed our 17 evaluation of the transfer of palladium into smoke. 18 The amount found for 13 I cigarettes containing 19 palladium at .05 percent was .01 UG cigarette. This 20 would be further reduced by filtration to about .07 UG 21 cigarette. 22 See that? 23 A Yes. 24 Q Am I correct this letter that shows at least 25 -- not getting into how dangerous it is, this letter 05672 1 shows that the palladium is transferring into the 2 smoke? 3 A Right, and just to clarify my earlier answer 4 I had thought you asked me whether or not they had 5 done any testing. I did not consider any of this 6 stuff that was done in-house by them to be the testing 7 you were referring to. I didn't think it was 8 adequate, I see they had done this and I remember this 9 from my deposition but this was not the kind of 10 testing that I thought we ought to engage in, that 11 being outside testing accomplished by --12 Q You agree this letter would tend to show you 13 by the time you became involved in the XA project your 14 client already knew, already knew that the palladium 15 at least does transfer in some amount into the smoke?

16 A Absolutely, yes.

17 Q And was this disclosed to the

http://legacy.library.ucsf&du/tid/edp65a00/pdfdustrydocuments.ucsf.edu/docs/pghd0001

Federal Trade 18 Commission, this letter? 19 A This letter wasn't in the packet 20 certainly -- I say this very honestly -in my 21 informal discussions with the trade commission guys 22 and ladies I made it clear that one of the things that 23 we were waiting for was inhalation testing on the 24 palladium additives because when I described this very 25 informally about an exciting process, I said we were 05673 1 awaiting testing which obviously would be part of the 2 discussion. So to me when we're talking about 4 for inhalation testing to see if there is any 5 residuals of palladium in the exposed mice, clearly 6 that's sort of an admission by the very fact what 7 we're doing. I doubt that this is in the book. 9 Q I'll get to that before we get to the 10 inhalation study. The first issue is whether the palladium in 12 fact transfers into the smoke as opposed 13 transferring into the smoke. 14 Understand the question? 15 A Yes. 16 Q This document shows that at least Liggett 17 knew at the time that you became involved that some 18 palladium does transfer into the smoke that would be 19 ingested if people smoked the product? 20 A Yes. 21 MR. FERGUSON: Objection, misstates the 22 document. THE COURT: Sustained. 23 24 BY MR. WEBB: 25 Q Does it say that we have completed our 05674 1 evaluation of the transfer of palladium into the 2 smoke? 3 A I think the document speaks for itself, and 4 the answer to your question would be yes. 5 Q I'm not very good on these things

but am I 6 correct that the phrase .1 UG, UG refers to microgram, 7 is that correct? 8 A I think so. 9 Q If we use straight math, one-tenth microgram, 10 that's a hundredth nanogram, is that right? 11 A Sounds right. 12 Q Do you know whether transferring a hundredth 13 nanograms of palladium into the human lung for each 14 cigarette smoked, do you know whether that would 15 create a significant health risk? 16 A Do I? 17 Q Yes. 18 A No. 19 Q Now Liggett, you mentioned Liggett -- strike 20 the question. 21 At the time that you were putting together 22 that material -- strike the question. At the time that Liggett was putting the 24 material together for you to go to the FTC in the fall 25 of 1978, the only test that Liggett had done to see 05675 1 whether or not there would be any harmful impact on a 2 human being ingesting a hundred nanograms of palladium 3 every time he or she smoked one of these cigarettes, 4 the only testing done was called a 30-day inhalation 5 study of rats, is that correct? 6 A I don't know whether that was part of a 7 continuing 24-month study. Yes, there was a 30-day 8 inhalation study completed at the time that you 9 referenced it. 10 Q It's included in that material, is it not? 11 A Yes. 12 Q The 2-year study wasn't concluded yet? 13 A I think we were 6 months into it but not 14 positive. 15 Q Hadn't been concluded? 16 A Had not. 17 Q The only testing you knew about that was 18 complete that would tell us anything one way or the 19 other on whether ingesting palladium into

a smoker's 20 lungs because it transferred into the smoke, the only 21 testing that had been completed was a 30day rat 22 study, is that correct? 23 A That's my understanding, that's my 24 understanding. 25 Q And the 30-day rat study showed that during 05676 1 that 30 days the rats did not what is called 2 bioaccumulate, they didn't accumulate palladium in 3 their organs, is that fair to say? 4 A I think so. 5 Q What that study doesn't tell us, does it, is 6 whether or not ingesting the smoke into and having it 7 come in contact with your lung tissue whether or not 8 that might have some negative health effect on a 9 human's lung tissue? 10 A Let me see if I understand that. If you are 11 saying does the 30-day inhalation study on rats have 12 any extrapolation to humans, I guess that would be the 13 first problem. 14 Q Answer that. 15 A No. 16 Q The second question would be whether or not a 17 bioaccumulation could even be measured in that 30-day 18 period and whether or not that would have harmful 19 implications? 20 A I don't know the answer to that because 21 that's really beyond me but it would strike me if in 22 fact when you did an assay, you sacrifice the animals 23 after the study and if you do a bioassay and find no 24 palladium in the tissue, that's part of the answer but 25 not the whole answer. That's my understanding. 05677 1 Q At the time Liggett was talking to you about 2 going to the FTC you at least were aware that the 3 materials that were in this book did not yet fully 4 address the issue as to whether or not

there would be 5 any danger to humans if they smoked a palladium 6 cigarette and ingested some palladium into their 7 lungs, that question had not been answered at that 8 point? 9 A That's right. 10 Q That's not an insignificant issue, is it? 11 A No. And as I tried to explain, I thought I 12 did this Tuesday, I tried to explain I thought what 13 would happen would be that we might very well have 14 gotten into some longer term tests, possibly even 15 involving large animals or humans, if this thing had 16 gone forward the way it might have. 17 Q You have been looking at the rat study first, 18 the rat study does not translate to humans, 19 predict what would happen in humans, does it? 20 MR. FERGUSON: Objection, repetitive. 21 THE COURT: I think it's been asked and 22 answered. 23 BY MR. WEBB: 24 Q The rat study, am correct, advertised the 25 palladium cigarette with a filter on it or do you 05678 1 know if that's the case? 2 A Let's take a second. Where in this document 3 is the 30-day inhalation study? 4 Q I'll tell you where I think it is. MR. FERGUSON: Tab H, section Roman numeral 6 VI, LGN000404. 7 MR. WEBB: I think Mr. Ferguson is correct. 8 THE WITNESS: We won't take the time to look 9 at this too careful. 10 BY MR. WEBB: 11 Q I couldn't tell if they tested filtered or 12 unfiltered cigarettes. Do you know one way or the 13 other? If you don't, tell me. 15 A Don't know, without looking at the document I 16 don't know.

17 Q Don't want to take the time now. 18 Here is the question, doesn't go to science, 19 goes to common sense. 20 The letter that we just showed the jury shows 21 that the filter reduces the amount of palladium that 22 would be transferred to the smoke? 23 A Right. 24 Q Right, from one microgram to .07 microgram. 25 See that? 05679 1 A 30 percent reduction again. 2 Q Do you agree with me that because -- I know 3 you don't smoke, but sometimes people do pull filters 4 off cigarettes to get a stronger smoke. Have you heard or believe people do that 6 sometimes? 7 A I've seen that done on rare occasions. 8 Q Here is the only question: Do you agree with 9 me that before Liggett would market this product that 10 had palladium in it, Liggett would need to test it, 11 both the filter and unfiltered, just to be able to get 12 some gauge as to whether or not the unfiltered 13 product, if someone did that, took the filter off as 14 to whether they would be harmed by smoking that 15 product? 16 A We talked about the nitrate issue and I 17 thought by adding nitrate ran into a problem and that 18 was always addressed by adding a filter. Honestly, I 19 never thought about having to warn the consumer not to 20 detach the filter on the cigarette. 21 Q Not asking about warning, asking about 22 Liggett as a responsible company would anticipate that 23 and also test the unfiltered version? 24 A Looks like they did, looks like they did 25 there. 05680 1 Q I'm talking about in the inhalation study? 2 A If they did there, they probably

should have

3 done it here. But the premises, I'm

having trouble 4 with the premises because as I said before, I haven't 5 noticed that phenomena very much. 6 Q I'll move to nitrates. 7 Besides palladium, the other constituent that 8 the XA technology added into the tobacco are what are 9 called nitrates, is that correct? 10 A Yes. 11 Q Are you looking for something? I'll stop if 12 you're looking. 13 A No, I'm refreshing my own recollection 14 continuously on this document. 15 Q Fine. But I'll stop in you want to look at 16 it further. 17 A No. 18 Q I want to talk about nitrates for a little 19 bit. 20 Liggett, besides the palladium Liggett added 21 in the constituent called nitrate into the tobacco, is 22 that correct? 23 A Right, as a part magnesium nitrate, as I 24 understand it. 25 Q Nitrates were actually added into the 05681 1 palladium technology. Ignore all my spelling, my 2 worst nightmare. Nitrates were added in two forms, tell me if 4 I'm correct. Liggett experimented with using a high 5 Burley tobacco that had a high level of nitrates in 6 and of itself then added in additional nitrates, is 7 that correct? 8 A Put this way, they either used the tobacco 9 that was high in nitrates and maybe even added 10 supplemental nitrates to that or added more nitrates 11 to nonhigh in nitrate tobacco. 12 Q We're saying the same thing. Now when you began to work on the XA project 14 early on you became aware that when a cigarette 15 manufacturer starts to develop a new cigarette product 16 by adding nitrates into the product that that did

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17 create some potential serious health
problems, is that
18 fair to say?
19 A Yes.
20 Q Explain that to the jury, and the
jury heard
21 a Dr. Farone testify last week and I want
to make sure
22 that you and I are on the same page.
     The problem with adding nitrates
in is that
24 nitrates when the cigarette burns, when
that cigarette
25 burns, the nitrates create oxides of
nitrogen, is that
05682
1 right?
 2 A Yes.
 3 Q Now the problem with that is that
the oxides
 4 of nitrogen interact with the alkaloids in
 5 cigarette and they create nitrosamines, is
that
 6 correct?
 7 A Yes, and pronounced correctly,
too.
 8 Q Thank you, it's a miracle. I
forgot the name
9 the other day.
10
    And the problem with nitrosamines
is that
11 nitrosamines are very carcinogenic, is that
correct?
12 A That's my understanding.
13 Q And that means they can cause
cancer, isn't
14 that correct?
15 A Yes.
16 Q So the -- did Liggett tell you
that by the
17 time you became involved in this project
in 1978 that
18 the scientific community had identified
nitrosamines
19 as the single most dangerous constituent
of cigarette
20 smoke?
21 A I don't know. I mean I don't
know whether
22 Liggett told me that but I certainly was
aware of
23 adding of nitrates was a problem.
24 Q My question was: Did you come to
learn not
25 only was it a problem but the presence of
nitrosamines
05683
 1 was the single most dangerous constituent of
cigarette
 2 smoke or did Liggett tell you that, if you
 3 A Put that way, as I discussed, I
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wanted them 4 to affirmatively disclose the fact they added nitrate. 5 There were reasons for that, I don't know whether they 6 went to knowing that about knowing nitrosamines that 7 specifically, but certainly I knew it was a problem. 8 Q See how serious a problem it was, I'll show 9 you. 10 I'll show you a chart, this was drawn or 11 prepared by testimony of a scientist called Dr. Farone 12 last week. I'll show this to you, see if 13 consistent with your general understanding at the 14 time. MR. FERGUSON: Misstated, one you 15 were 16 showing was drawn by Dr. Burns, I think this one is --17 MR. WEBB: Dr. Farone used this chart last 18 week. MR. FERGUSON: Never mind. 19 2.0 He made me do it. 21 MR. LUVERA: I take full responsibility. 22 MR. WEBB: I'll give you responsibility. 23 Q See that okay? 24 A Yes. 25 O This is a chart drawn for the jury last week 05684 1 when Dr. Farone was on the witness stand, I'11 2 represent to you? 3 A Okay. 4 Q Dr. Farone, a research scientist who used to 5 work at Philip Morris ranked what were called the bad 6 guys of cigarette smoke. 7 See that? 8 A Yes. 9 Q He ranked nitrosamines as number one, 10 aldehydes as number two, the PAHs that you talked 11 about as number three, the heavy metals as number 12 four, and the radioactive materials as number five. 13 See that? 14 A Yes. 15 Q Is that consistent with your 16 understanding at the time that you began

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to work for
17 Liggett on this XA project?
18 A Yes.
19 Q Did Liggett tell you that as of
the 1978-1979
20 time period that the scientific
community was
21 advocating that the tobacco companies
find a way to
22 remove nitrates from tobacco?
23 A I don't recall that
conversation that
24 specifically.
25 Q Dr. Farone told the jury that
it would not be
05685
1 good enough to get 90 percent of the
nitrates out,
 2 have to try to get 99.999 percent out,
if you can.
 3 I'll represent he said that.
 4 I'll ask you this question: If
the goal of
 5 the scientific community and of cigarette
companies
 6 was to get nitrate out of cigarettes, does
it make any
 7 sense for Liggett to being adding them in
to make a
 8 safer cigarette, does that make sense to
you?
     A I'll explain what they said to me.
 9
You will
10 see in my memo I said they had to
affirmatively
11 disclose it. I know in the booklet
when we went
12 through the bar charts certainly the
nitrates are
13 listed. If you look at the nitrates,
nitric oxide are
14 really somewhat at the top ten brand level
but above
15 low tar brand level.
16 Some of the other bad guys, as
they say, the
17 number two bad guys are somewhat lower,
quite a bit
18 lower.
19 What they said to me, this is 20
years ago,
20 was we've added nitrates but the overall
benefits are
21 significant.
22 I'm saying to them, look, from
what you are
23 telling me we need to disclose that we're
adding
24 nitrates, it's a problem, the other
benefits would
25 hopefully be brought into a balanced
discussion.
05686
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- 1 Remember, this is 20 years ago. I realize science has
- 2 come a long way, I don't remember things quite as
- 3 specifically as Dr. Farone is testifying currently
  - 4 about where science was.
- 5 I know that nitrates were a problem for me,
- $\ensuremath{\text{6}}\xspace$  I wanted to affirmatively disclose that we added them
- 7 and I wanted this bar chart to have them -- the rest
- 8 of the discussion is now something that sort of takes
- 9 me currently as opposed to what was going on in '78.
- 10  $\,$  Q Dr. Farone was testifying about what was
- 11 being done in 1978 to get nitrates out?
- 12 A We were adding.
- 13 Q I ask you, does that strike you
- as something
- 14 unusual?
- 15 A I thought it was a problem,
- that's why I
- 16 wanted to disclose it.
- 17  $\,$  Q Based only the work you did for the tobacco
- 18 company, for Liggett, did you become aware over time
- 19 that science marches on and sometimes the scientific
- 20 community changed its mind about what it thought were
- 21 the most serious problems in cigarette smoke.
- 22 Did you have any discussions with Liggett on
- 23 that subject matter?
- 24 A Not really. I know that it was
- an evolving
- 25 picture.
- 05687
- 1  $\,$  Q  $\,$  Did Liggett ever tell you that there was a
- 2 time in the 1960s that PAHs were actually viewed as
- 3 the most serious problem but that later changed as
- 4 smoke chemistry became more sophisticated and found
- 5 out nitrosamines were far more serious, was that
- 6 subject matter ever discussed with you?
- 7 A I don't think.
- $8\,$  Q And you just told the jury that the bar chart
- 9 you are talking about shows that the -- let me get the
- 10 bar chart out to show the jury what we're talking
- 11 about.

12 A Nitric oxide piece is LGM89. 13 Q I'll show that to the jury since you referred 14 to that page. 15 What this page shows is that Liggett, 16 Liggett's experimental product, the prototype, see 17 that, is pretty high in nitric oxide. 18 There's a number of cigarettes on the market 19 lower in nitric oxide? 20 A Certainly the low tar brands are much lower. 21 Q If the goal is to get 99 and ninetenths 22 percent of the nitrates out, if you add some 23 are bound to increase nitrosamines, aren't you? 24 A Yes. 25 Q So this cigarette that your client said that 05688 1 they might have you go see the FTC about appears now 2 to be high in nitrosamines, at least according to that 3 chart? 4 A Right. 5 Q And according to the memo this morning was no 6 different in PAHs than other commercial cigarettes? 7 MR. FERGUSON: Objection, argumentative, 8 contrary to the testimony. THE COURT: Overruled. 9 THE WITNESS: Based on this fellow 10 who I did 11 not know's memo, that's right. BY MR. WEBB: 13 Q In this courtroom, as you see this unfold, does 14 that -- does this cause you as a lawyer to say maybe 15 the XA product was not what it was cracked up to be? 16 A I'm the fellow who basically shot down all 17 the ads wanted them to disclose nitrates, wanted us to 18 start a dialogue before we promoted it at all, wanted 19 to make sure what we were saying was accurate, doesn't 20 change my view of what I felt in 1978. What changes my view was the fact that the 22 nitric piece, the nitric oxide piece might 23 relatively more important than it was

explained back

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24 in '78.
25 Q Because I do think -- I don't want
to
05689
1 misstate it, you told the jury you actually
thought
 2 back in 1978 the cigarette might have
health benefits
 3 even though not proven yet?
 4 A I thought it might, yes.
 5 Q Does this cause you to reflect
upon that
 6 testimony a little bit?
 7 A I still don't know the answer to
that
 8 question because we never got the dialogue
I thought
 9 we should have had but that wasn't my
decision.
10 Q Am I correct the Liggett scientist
-- Judge,
11 I can go on.
12
    THE COURT: Let's take a break.
13
    (At this time a short break was
taken.)
14 THE COURT: Please sit down.
   BY MR. WEBB:
16 Q Mr. Meyer, I need to return
actually to
17 something I forgot to ask you about. I am
going to go
18 back to these PAHs for just a minute. Are
you with
19 me?
20 A Yes.
21 Q The reason I am going back is that
several
22 times this morning when I was asking you
questions
23 about whether or not you learned that the
PAHs in fact
24 were no different or no lower than in other
commercial
25 cigarettes, you had told me several times
that you
05690
1 didn't know one way or the other whether
the scientist
 2 who prepared Exhibit 6052, whether he was
correct or
 3 not.
 4
   Do you remember that testimony?
 5 A Yes.
 6 Q You know Mr. Bowen Ross, do you
not?
 7 A Yes.
 8 Q Mr. Bowen Ross was the patent
attorney for
 9 Liggett, is that correct?
10 A Yes.
11 Q You had confidence in Mr. Bowen
Ross, did you
12 not?
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13 A Yes. 14 Q You thought he was a good lawyer? 15 A Yes. 16 Q You thought he was honest? 17 A Yes. 18 Q Did Mr. Bowen Ross -- and you told us this 19 morning that Mr. Ross knew a lot more about the 20 underlying technology of the XA product than you did, 21 is that correct? 22 A Sure. 23 Q Mr. Bowen Ross is one of the people that put 24 the materials together for you to give to the FTC? 25 A Right. 05691 1 Q Is that correct? 2 A Right. Q And so did you ever talk to Mr. Bowen Ross 4 after you became involved in this project, and at the 5 time that you were given this material to give to the 6 FTC, 6461, at that time did you ever talk to Mr. Bowen 7 Ross about whether or not he had learned the very 8 thing that set forth in 6052, that the PAHs 9 different and no lower than in other commercial 10 cigarettes? 11 A Well, maybe I am confused. But what I think 12 I testified to this morning was that there 13 discussions, and I'm sure I had those with Bowen, 14 about the fact that it was not the quantity, it was 15 the character. 16 And we talked about whether the character --17 could you have the same PAH or PCAH presence in the XA 18 cigarette as you did in a conventional cigarette, but 19 it was the character or quality of those that was 20 different, and thus the tumorigenicity or 21 carcinogenicity was lower. And I don't know who the 22 scientist is. I keep stressing the -- this paper tells me, 24 and I don't know when this paper was prepared, was 25 that this fellow, even though he felt the

way he did,

05692 1 he still felt they ought to be promoting this product 2 on the basis that it reduces tumors. Now, in response to the Bowen Ross questions, 4 I can only say that what I recall twenty years ago 5 about Bowen is that it wasn't the quantity, it was the 6 quality or character of them. That's what he was 7 talking about. And I may have misinterpreted it. But 8 that's what I remember about Bowen. 9 Q Did Bowen Ross ever tell you that he also had 10 come to learn that there was no difference in the PAH 11 levels between commercial cigarettes and this new 12 experimental XA product? 13 A No difference --14 MR. FERGUSON: Hearsay. THE WITNESS: He might have. I 15 don't 16 remember him talking about levels as much as character 17 or quality. BY MR. WEBB: 19 Q Did he ever tell you the levels were no 20 different? 21 A I don't remember, but he might have. I don't 22 remember that being the stress there. What 23 trying to say, it wasn't the quantity, it was the 24 character of the PCAHs as modified. 25 Q Let me show you what is -- there is a 05693 1 document that is in evidence as State Exhibit 6460. I 2 don't have an extra copy, but I will show it to you on 3 the screen. 4 A Okay. 5 Q This is in evidence, and it purports to be 6 Mr. Ross's diary regarding the XA product. I will 7 show you the front page of it. 8 A Has it been translated? 9 Q We are going to see if you can help us on 10 this. And I'm going to come back out here. I will 11 represent to you that this is Bowen Ross -- this has 12 been identified as Bowen Ross's diary. 13 Can you see it, sir?

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14 A Yes.
15 Q I will turn to a page that is
Bates stamped
16 at the bottom, Mr. Ferguson, JBR0054 --
Strike that.
17 Take that back. That is not the right
page.
     I am going to go to a page that
is actually
19 Bates stamped JBR0102. And I'm going to
try to hone
20 in on this entry, if I can, to see if you
can read
21 that. I will read -- and tell me if it
appears that I
22 am reading this correctly.
23 Can you see it there?
24 A Starting with the advertising?
25 Q I will read it, and tell me if
I am wrong.
05694
1 It says, the advertising was
more or less
2 blown out of the water.
3 MR. FERGUSON: Excuse me. Can
we stop for
4 just a second?
 5 Maybe counsel can show me -- my
number 102
 6 page doesn't look like this.
7 THE WITNESS: 0102?
8 MR. FERGUSON: Yeah.
9 MR. WEBB: Can I see yours?
10 MR. FERGUSON: Mr. Phillips
straightened
11 it out. Thank you.
12 MR. WEBB: I think there is a
difference in
13 just Bates numbers. We both agree it is
in this
14 document.
15 THE COURT: That's fine.
   BY MR. WEBB:
16
17
    Q Sir, do you see there where -- I
am going to
18 read it, and tell me if I am reading
correctly, where
19 it appears to say, the advertising was
more or less
20 blown out of the water. Can't sell PCAH
because many
21 are lower, i.e., another "me too."
22 Did Bowen Ross ever tell you
that?
23 MR. FERGUSON: Objection, hearsay.
24 THE COURT: Overruled.
25 THE WITNESS: No. I would only
say to you
05695
1 before what he talked to me about was the
quality, not
2 the quantity.
 3 BY MR. WEBB:
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4 Q Did he ever tell you this? 5 A That you can't sell PCAH because many are 6 lower? No, he never said that to me at the time. 7 Q Let me show you another page in his diary. 8 By the way, the date on that, just so the jury knows 9 it, is July 12, 1970, so you can't see the 10 number. 11 Do you see that? 12 A Right. Who is at that meeting? I went to a 13 number of those meetings. I take it I am not at that 14 meeting. 15 Q It does not appear that you are. Do you want 16 to look at it to be sure? 17 A I was at a number of those meetings. He has 18 a line in there that I saw that says inter NCK in full 19 glory, which would be his way of expressing that they 20 would always have twenty people at a meeting. I'm sure I'm not at that meeting. 22 Q I will show you the next page, so at least we 23 can see what year we are in. 24 On the next page there is an entry that says 25 6/13/78? 05696 1 A Right. 2 Q So it would appear this is July 12th, '78? 3 A Yes. 4 Q Let me show you another entry in Mr. Ross's 5 diary. 6 I am now reading from the number I have, Mr. 7 Ferguson, Bates stamped JBR0151. 8 MR. FERGUSON: I have it. Thanks. 9 BY MR. WEBB: 10 Q And down at the bottom Mr. Ross has written, 11 PCAH test now didn't show a difference? 12 A Right. 13 Q Do you see that? 14 A Right. 15 Q Did he ever tell you that? 16 A Well, I mean -- I'm trying to be fair, and I 17 don't know where we are going, because what I am 18 saying is if the test shows that they are

at the same

19 level, then that test doesn't show a

difference, if in 20 fact the difference is because of the quality or the 21 character of the PCAH. In other words, you might have 22 a cigarette with exactly the same number of PCAHs, but 23 if the PCAHs in the XA cigarette act differently, then 24 you have the lower incidence of tumors. And -- as I think about this morning, 05697 1 which is really the first time, the reason why -- as I 2 said, even the scientist who is being objective, to 3 say the least, says, go with the claim on reducing 4 tumors, because that's the claim that was clearly 5 valid in I think everyone's judgment. How it got 6 there and whether it was PCAH or the character with 7 the PCAHs, no one really knew. 8 Q This material that was put together to give 9 to the FTC, did it explain that to the FTC? 10 A Well, it sort of did. I mean, I haven't --11 again, this is sort of like taking an exam, and I am 12 too old to take exams. At the beginning of this 13 document, in the very first summary --14 Q Which page are you on now? 15 A I am on page 7. LGM7, right in 16 beginning. What I am trying to say is --I looked at 17 this very briefly during the break. And they talk 18 about -- specifically in the subfractions 19 containing PCAHs, of which 3, 4, dash BP is one 20 member. When he attempted to subdivide the PCAH into 22 one or more active components, we soon discovered 23 there was a great number of individual substituted 24 PCAHs that differed only slightly in structure, many 25 of which seem to be contributing cumulatively to the 05698 1 total tumorigenic activity. This I remember, because 2 I was shown the summary before the book was sent to

3 me. What we were trying to say is something happened 4 to these PCAHs in this palladium nitrate process that 5 changed the character of the PCAHs, and got the 6 results we got. 7 But that's where Larry stops. I mean, if I 8 have an explanation that something is different going 9 on, that's what I am doing. I am not trying to 10 mislead the commission. In fact, far from it. I 11 don't want anything happening until the commission is 12 completely satisfied. But in terms of the specific 13 question, was it because they were lower or changed or 14 whatever, then I can't say anything more than I have 15 said. 16 Q When did you come up with this idea that it 17 wasn't the levels, but the quality? When did you come 18 up with that issue? 19 MR. FERGUSON: Objection. Argumentative. 20 THE WITNESS: When you asked me the questions 21 this morning, I am looking right here -you asked me 22 to look at it. I start at the beginning. 23 brings back, you know, the fact -- I don't know what 24 was going on twenty years ago very well. But when I 25 look at that it was not quality, it was character. 05699 1 Because then when we go to our charts, when we go to 2 our charts, what I see on the charts is in fact -- if 3 I look at these charts which have the infrared mass 4 spectroanalysis, and then I take them back to the 5 others, I remember -- I remember adding -or at least 6 them telling me they added nitrates, and this last --7 nitric oxide in this last page. Not the last page 8 perhaps, but the one before the last page, which is 9 nitro- -- whatever. 10 In response to disclosing the

fact that

11 although these bad guys, as you call them, were --12 many of them were reduced and many of them were no 13 different. A couple were at least at the level of the 14 highest top ten cigarettes. And I remember talking 15 about that issue. And I remember being told -- it 16 being told to me even then, what I am getting into is 17 over my head, because numbers didn't mean numbers. 18 Numbers couldn't really be analyzed because there were 19 so many different things going on. that's where 20 you get into this discussion of subfraction and 21 components. 22 Twenty years ago did I think this was an 23 accurate document? Yes. Can we honestly tear it 24 apart today? Probably. Q The fact is, this document directly told the 05700 1 FTC that it was the levels of the PCAH that was 2 causing the smaller -- didn't this document that was 3 put together for you directly tell the Federal Trade 4 Commission it is the levels, the levels, not the 5 quantity, the levels of the PCAHs that is causing the 6 lesser number of cancer tumors? MR. FERGUSON: Argumentative and 7 contrary --8 THE COURT: Sustained. 9 BY MR. WEBB: 10 Q Let me show you this document. Let's just 11 look at this document. This is exhibit -do you want 12 to look at Exhibit 2E? 13 A Right. And I understand -- okay. I'm sorry. 14 There is no question. 15 Q My only question is -- we will just read it 16 together. It tells the FTC that the carcinogenicity of 18 cigarette smoke condensate towards mouse skin has been 19 dramatically reduced by 77 to 100 percent through a 20 combination of palladium metal, the catalyst, with

21 blends high in Burley tobacco content, or with lower 22 Burley tobacco blends supplemented by the addition of 23 compensating amounts of nitrate salt. This lowering 24 of carcinogenicity is associated with decreases in the 25 level. 05701 1 Do you see that? A Right. That's right. There is no question 3 that this document, prepared by A. D. Little and the 4 Liggett guys, is not -- is precisely accurate as what 5 I would read my expanded summary to say, because, 6 again, if in fact -- and I don't know when this other 7 document was prepared or whether this was inaccurate, 8 it is not just levels, it is obviously the character 9 of the PCAH fraction and the components of the PCAH 10 fraction. 11 So all I am saying, in fairness to the guys 12 who put this document together, and in fairness to 13 what I was talking about presenting to the FTC, I am 14 not so sure that -- sort of taking your suggestion 15 that I look at it, that there is not some things in 16 here that qualify this statement. I agree with you, 17 this statement, based on what we discussed this 18 morning, is not as accurate as it should be in this 19 paper. 20 Q Let me return to the issue of the other 21 problem of nitrates. We will go back to our chart. 22 So the jury understands what happened at Liggett, is 23 that Liggett -- am I correct, when you started working 24 on this project Liggett was very much aware that if it 25 did not solve the nitrate problem it was not going to 05702 1 be putting this cigarette into the marketplace? Is 2 that a fair statement? 3 A If it did not reduce the nitrates that were

4 higher because they had added nitrates, the product 5 probably would not have been marketable, yes. 6 Q And that's what I want to talk to you about. 7 Because we are talking -- we are talking about a 8 product that would have gotten into the market, people 9 would understand what it is, buy it and save the State 10 money. Do you understand the issue? 11 12 A Yes. 13 Q We are talking about whether this product 14 ever could have gotten into the market. If the 15 nitrate problem did not get solved by Liggett, this 16 product was not going anywhere, was not even going to 17 be introduced in the market by Liggett, is that 18 correct? 19 MR. FERGUSON: Asked and answered. THE COURT: Overruled. 20 THE WITNESS: That's my understanding. 22 BY MR. WEBB: 23 Q And so Liggett decided to start experimenting 24 to see if it could solve the nitrate problem, is that 25 correct? 05703 1 A I believe so. 2 Q In fact, so the jury understands, you used 3 some numbers on your direct examination about how this 4 product reduced tumors, both cancer tumors and 5 noncancer tumors by 88 to 100 percent, is that 6 correct? 7 A Right. 8 Q That actually -- there was a mouse skin -- I 9 will put MSP, for mouse skin painting. Those numbers 10 that you told the jury about, they came from what 11 Liggett -- for what was known as Liggett's first mouse 12 skin painting test, is that correct? 13 A I think so. 14 Q And Liggett then decided to find out whether 15 it could solve the nitrate problem by reducing the

16 nitrates, and Liggett then, as scientists are supposed 17 to do to see if they can reproduce the test, they 18 lowered the nitrates and they did a second mouse skin 19 painting test to see what the results were, is that 20 correct? 21 A Well, I think what I testified to -- what I 22 understood is in the second test they added less 23 nitrate by using a Burley tobacco higher in nitrates, 24 and that was the premise on which the second test went 25 forward. 05704 1 Q Right. But by doing it that way they were 2 lowering the overall nitrate level? They didn't add 3 any extra nitrate in at all, did they? 4 A It was my impression they might have added 5 some extra nitrate. I will put it this way, whether 6 it was the same level of nitrate as the first test, 7 which it was my understanding or not, the second test 8 was -- the nitrate that came to the product 9 principally from the tobacco, the Burley tobacco. 10 Q All right. So then if it was from the Burley 11 tobacco, that means they didn't add in the extra 12 nitrate? 13 A I don't know whether they did or not. I know 14 that the test was a failure, but I don't know whether 15 it was because it was nitrates in the tobacco or the 16 level of nitrates. 17 Q Well, were you aware that Liggett, when it 18 did its second mouse skin painting test, was trying to 19 see if it could lower nitrates and see if the product 20 would still work? 21 A Counsel, I don't think we disagree. What I 22 am saying is I don't know whether it is lower nitrates 23 or lower added nitrates by using tobacco that was high 24 in nitrates to begin with. I don't think very many

25 people use Burley tobacco for that reason. They were 05705 1 using a tobacco that was high in nitrates 2 effort to lower the additional amount of nitrate they 3 would have to add. That was my understanding. I 4 might be wrong. 5 Q Your understanding is they were trying to 6 lower the extra nitrate they had to add in? 7 A Right. There is no question that's right. 8 Q What they found out is by not adding in the 9 extra nitrate this product did not work? 10 A Absolutely, did not work. 11 Q Didn't reduce the tumors on the backs of 12 those nice at all compared to commercial cigarettes? 13 A That's my understanding. 14 Q And then Liggett had a problem, so it went 15 back and it did a third mouse skin painting test and a 16 fourth mouse skin painting test. And what it found 17 out from those last two tests is that it could not 18 make the product work, even on mice, without keeping 19 the nitrate level -- the added nitrate level at a 20 higher amount, is that correct? 21 A I think that's right. 22 Q So what Liggett found out is that it was not 23 doing -- strike the question. 24 Now the problem with the mouse skin painting 25 test, though -- and Liggett recognized this problem, 05706 1 did it not -- is that by adding in the nitrates and 2 increasing nitrosamines the mouse skin painting test 3 did not tell Liggett whether or not the increased 4 nitrosamines would actually cause additional tumors in 5 mice? Is that correct? 7 A I don't understand the question. 8 Q Let me break it down. You are aware, are you 9 not, that nitrosamines are what are referred to as 10 organ specific carcinogens, that means

that whatever 11 cancer causing activity they have they cannot be 12 detected in a skin test? 13 A I will accept that. 14 Q I am asking you if you knew that? 15 A It may have been said. It is not something 16 that I use very frequently in my work. I am not a 17 scientist. I am not a doctor. 18 Q I don't want to -- let me give you a Liggett 19 document that is in evidence that is marked as AS1297. 20 I will ask you to look at that document so the jury 21 can understand where we are going here. This is a 22 Liggett document. 23 Do you see that, sir, it was produced to us 24 by Liggett? 25 A Yes. 05707 1 Q And do you see that it is a memo to Mr. 2 Kensler. Do you see that, sir? 3 A Yes, I do. 4 Q And the subject is skin painting workshop. 5 Do you see that? 6 A Um-hum. 7 Q Do you see that? 8 A Yes. 9 Q And I want to call your attention down here 10 to -- I want to make sure -- find out --11 specific carcinogens, e.g., nitrosamines, are not 12 detected in skin assays. 13 A Yes. 14 Q Do you see that? 15 A Yes, I do. 16 Q Were you aware at the time you were getting 17 ready to go to the FTC that those mouse skin painting 18 tests wouldn't even tell Liggett whether or not the 19 nitrosamines would cause additional tumors in mice? 20 A No, I wasn't. 21 Q And that was not disclosed -was that 22 disclosed in this document that was put together to 23 give to the FTC? 24 A Well, I wouldn't think so, no. 25 Q Now, when you began to work on the XA

05708 1 project, did some of the Liggett scientists tell you 2 that they had become very, very concerned about this 3 increase of oxides of nitrogen that was resulting from 4 adding in the nitrates? 5 MR. FERGUSON: Objection. Asked and 6 answered. THE COURT: Sustained. BY MR. WEBB: 9 Q Well, let me show you a document that is in 10 evidence. I am going to give you now a document that 11 is marked as State Exhibit 6057. I would just ask you 12 to look at the first page. And I will show you what 13 part of this document I want to talk to you about. 14 But this document I will put on the screen for the 15 jury here. This is a document marked as Exhibit 6057 17 which is a document dated April 1, 1975. Do you see 18 that, sir? 19 A Yes, I do. 20 Q And it is to Dr. Mold, do you see that? 21 A Yes. 22 Q And it is from this scientist A. G. 23 K-e-l-l-i-a-n-o-s, who you said you didn't know? 24 A Yes. 25 Q And Mr. T. B. Walker. Do you know Mr. 05709 1 Walker? 2 A No, I don't recall Mr. Walker either. 3 Q It says that the topic is the agenda for 4 discussion of plans for marketing a biologically 5 approveable cigarette. Do you see that? 6 A Yes. 7 Q We will look at the first couple of 8 paragraphs. Just so you know what the document is, 9 the objective is to get into the market as soon as 10 feasible with a cigarette expected to be biologically 11 approveable. The meeting with ADL -- that is Arthur

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12 D. Little; is that correct?
13 A Yes.
14 Q -- personnel is intended to
assess our
15 position, foresee critical questions and
plan action.
16 The purpose of this memorandum is to
present the high
17 points of the makeup of the safe cigarette
samples
18 developed and to delineate some of the
possible toxic
19 hazards that need to be considered before
marketing a
20 new product of the type under
consideration.
   Do you see that?
21
22 A Yes.
23 Q Do you agree that Liggett has a
24 responsibility to do that, before it puts
a new
25 product into the market?
05710
 1 A Sure.
 2 Q Well, there is no doubt in your
mind about
 3 that, is there?
 4 A No.
   Q Now, if we go over -- I am going
to have you
 6 go over to the page that says Bates stamp
611 at the
 7 bottom. I think it actually is page 5.
It is hard to
 8 read on the Xerox.
9 A Okay.
10 O This document says -- this
Liggett document
11 says, as indicated above, increased
nitrate levels in
12 tobacco will result in increased amounts
of oxides of
13 nitrogen in cigarette smoke.
   Do you see that?
15 A Um-hum.
16 Q The very thing we are saying on
this chart?
17 A Right.
18 Q Such increase is considered to
be detrimental
19 due to the acute -- do you see that,
acute toxicity,
20 of oxides of nitrogen and the possible
formation of a
21 variety of nitrated and nitrosated
products in the
22 smoke.
23
   Do you see that?
24 A Yes, I do.
25 Q With respect to acute toxicity
of oxides of
05711
 1 nitrogen, we have some advantage in that
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most of the 2 oxides of nitrogen in smoke consist of NO, and NO is 3 about one-fifth as toxic as NO2. Do you see that? 5 A Yes. Q That is nitrogen dioxide? 7 A Yes. 8 Q NO is nitrogen oxide, is that your 9 understanding? 10 A That is my understanding. 11 Q And NO2 is nitrogen dioxide? 12 A Right. 13 Q It says, nonetheless, the quantities involved 14 are far to great to make this advantage meaningful. 15 Do you see that? 16 A Yes. 17 Q Now, if we go over a couple more pages we get 18 to this issue of nitrosamines. And the Liggett -- the 19 Liggett scientists are telling Dr. Mold, aside from 20 speculation about formation of Nnitrosamines in vivo 21 -- in vivo means in a live person? 22 A In a human. 23 Q In a human, is that correct? 24 A Yes. 25 Q So they are talking, aside from speculation 05712 1 about the formation of nitrosamines in humans in the 2 air passages of the smoker, even beyond that he says, 3 we are gravely concerned about the possible level of 4 N-nitrosamines in the smoke prior to inhalation. Our 5 concern arises from the fact that several 6 N-nitrosamines have been found to be carcinogenic, 7 mutagenic or teratogenic toward laboratory 8 the implications of similar effects in man is present 9 whether true or not. We cannot with any reliability 10 provide at 11 this time a list of which are carcinogenic and which 12 are not, although there is some evidence for believing 13 any N-nitrosamine incapable of forming a hydroxymethyl 14 group adjacent to the amine nitrogen may not be 15 carcinogenic. 16 Do you see that?

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17 A Yes.
18 Q My question, sir, did you have
discussions
19 with scientists at Liggett about the
nature or the
20 degree of their concern about this
product using
21 increased nitrates, creating oxides of
nitrogen,
22 creating nitrosamines and causing cancer,
did you have
23 discussion with him about the depth, in
this case,
24 their grave concerns?
25 A Truthfully, no. The only
discussions we had
05713
 1 were the fact that the additional nitrates
presented a
 2 problem.
            They felt they had solved that
problem, in
 3 fact to the degree they resisted my
recommendation
 4 that we affirmatively disclose the addition
of those
5 nitrates.
    When I say -- I talked with Dr.
Mold about
 7 this. I don't know the other gentleman.
I talked
 8 with the others. I never saw this
document. This is
 9 probably just before the period of time
that they
10 start talking with me about the project.
But
11 certainly this document -- your handing it
to me a
12 minute ago is the first time I have seen
it. I was
13 not aware of the depth of their concern,
if that is a
14 fair characterization.
15 Q Let me ask you this. You told us
I think in
16 1979 at some point Mr. Greer told you that
at that
17 time he did not want you to go have a formal
meeting
18 with the FTC, is that correct?
19 A At some point. Yeah, in the '79
time frame,
20 yeah.
21 Q Now -- but you continued to work
and did
22 legal work for Liggett up until 1986, is
that correct?
23 A Yes.
24 Q As far as whether this product
would ever
25 have gone into the market, did you
eventually become
05714
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1 aware that Liggett itself, its scientists had come to 2 the conclusion that this product was just 3 dangerous and that the scientists were recommending 4 you can't put it into the market? 5 A Truthfully, no one ever expressed that view 6 to me. 7 Q Let me show you a document that is in 8 evidence. I will now hand you a document that is 9 marked as Defense Exhibit AS001301 in evidence. And 10 I would ask you to look at it. And I will put it up 11 here for the jury. Let's go back and look at this 12 document together. This document is dated September 13 24th, 1984, is that correct? 14 A Yes. 15 Q You were still doing work for Liggett at that 16 time, according to your testimony, is that correct? 17 A Yes. 18 Q And this is a memo to a Mr. R. L. Kersey from 19 Mr. R. H. Wallack, W-a-l-l-a-c-k. 20 Do you see that, sir? 21 A Yes. 22 Q Were those Liggett scientists you had contact 23 with? 24 A I don't remember Wallack, but I remember 25 Kersey. 05715 1 Q Let's see what they are saying about this 2 product. 3 It says, some concerns regarding high nitrate 4 level in XA cigarettes. Do you see that? 5 A Yeah. 6 Q So they are talking about the subject matter 7 I am asking you about, you understand that? 8 A Yes. 9 Q It says here that recent literature 10 references have created some concerns regarding the 11 high nitrate levels in the XA product. 12 published studies may be brought to bear against 13 Liggett & Myers should the product be marketed in the

14 future.

15 Do you see that, sir? 16 A Yes. 17 Q Now, let's just look at number 1 -18 MR. FERGUSON: Your Honor, I object. I am 19 assuming he is trying to refresh the witness's 20 recollection, since he didn't have any. I think the 21 proper thing to do is show him the document and see if 22 it refreshes his recollection, rather than showing it 23 to the jury. MR. WEBB: This document is in 24 evidence. 25 MR. FERGUSON: For the purposes of 05716 1 refreshing, I think it is the improper way to do it. THE COURT: Overruled. BY MR. WEBB: 3 4 Q It talks about these -- do you see where this 5 scientist is talking about certain scientific 6 literature that is raising questions about cigarettes 7 with high nitrate levels? You understand the issue? 8 9 A Yes. 10 Q It says a paper published by D. Hoffmann. 11 Now, did you -- on the work that you did for Liggett, 12 did you come to know of a Mr. Dietrich Hoffmann who 13 was a renowned researcher in the area of smoking and 14 health? 15 A I knew of his name, yes. 16 Q In fact, I believe -- did some of 17 materials get put into this exhibit to go to the FTC? 18 A No. 19 Q So you are not doubting Dr. Hoffmann as being 20 a very well-known smoke researcher? 21 A Oh, no. 22 Q It says, a paper published by  ${\tt D.}$ Hoffmann, et 23 al., Carcinogenesis, London, it gives some cites 24 there, gives smoke data on cigarettes to which 25 elevated levels of nitrate, as sodium nitrate, have 05717 1 been added. These data show, as expected from other 2 earlier published work, lower yields of

tar, nicotine 3 and benzapyrene, a measure of PCAH content. 4 Do you see that? 5 A Yes. 6 Q However, he suggests that higher levels of 7 oxides of nitrogen and N-nitrosamines may increase the 8 carcinogenic potential of whole smoke. He thus 9 recommends that the nitrate content of tobacco 10 products should be reduced. Do you see that? 12 A Um-hum. 13 Q Now, do you agree with me, Mr. Meyer, and I 14 know you are a lawyer, not a scientist, do you 15 agree with me if the XA product, because it increases 16 nitrates, is going to actually increase the risk of 17 cancer, you would not recommend to Liggett that they 18 put that product into the marketplace, would you? 19 A No. 20 Q It goes on to say here, a publication by 21 Vello Norman. It says he is at Lorillard. 22 Do you see that? 23 A I see that. 24 Q Interesting. Actually Vello Norman had been 25 at Liggett, had he not? 05718 1 A Yes. If that's the same Vello. I don't know 2 too many Vellos. 3 Q There are probably not too many Vello Normans 4 working for the tobacco industry. 5 A Probably not. 6 Q Vello Norman is the person listed on the 7 patent as the inventor of the XA technology? 8 A One of them. 9 Q One of them? 10 A Yes. 11 Q Let's see what he as the inventor is 12 now saying in 1984. It says a publication by Vello 13 Norman -- did you understand he had left Liggett and 14 gone to Lorillard at some point in time? 15 A I knew that he had gone to another 16 competitor. I did not -- I see it was Lorillard. I

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17 actually thought it was Brown &
Williamson at some
18 point.
19 Q Well, at least this says
Lorillard.
20
    Lorillard, and it goes on, he
talks about a
21 publication, gives the effect of added
nitrate, as
22 magnesium nitrate -- I think that is the
form that was
23 actually being used by Liggett, magnesium
nitrate --
24 A Yes, it was.
25 Q -- in the XA technology, is that
correct?
05719
1 A Yes.
 2 Q The effect of added nitrate as
magnesium
 3 nitrate on delivery of increased levels of
oxides of
 4 nitrogen and hydrogen cyanide in cigarette
smoke.
5 These authors not only measured NO,
nitrogen oxide, in
 6 mainstream smoke, but also in sidestream,
and reported
 7 levels of five to ten times that found in
mainstream.
 8 With the present public concern about
secondhand
 9 smoke, this may be a problem and we should
plan on
10 determining sidestream levels for our
product.
   Do you see that, sir?
11
12 A Yes, I do.
13 Q Now, I want to know, back in 1978
when you
14 were getting ready to go to the FTC
and trying to
15 convince the FTC to allow the
marketing of this
16 product, did you have any information that
you were
17 going to call to the attention of FTC that
18 sidestream smoke -- that means the smoke
that other
19 people are going to breathe, is that
right?
20 A Yes.
21 Q Sidestream means the smoke coming
off the end
22 of the cigarette, sometimes called
secondhand smoke?
23 A Yes.
24
   Q Did you have any information that
25 secondhand smoke or sidestream smoke that
other people
05720
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- 1 around someone smoking this palladium cigarette, the
- 2 XA cigarette, that they might be encountering five to
- 3 ten times the amount of nitrogen oxide as found in
  - 4 mainstream smoke?
- 5 A No, not that specifically. In fact, it was
- 6 actually quite different than that. I looked at two
- 7 things. I looked at the introduction and I looked at  $\ensuremath{\text{1}}$
- $\ensuremath{\mathbf{8}}$  these charts. The hydrogen sulfide, which is in this
- 9 family, hydrogen cyanide, et cetera, was so much lower
- 10 with the XA cigarette that hydrogen cyanide reference
- 11 is puzzling to me. What it does underscore to me
- 12 very honestly, is when we first tossed these booklets
- 13 into the FTC, and they then called the health
- 14 authorities, that not only competitors but the
- 15 American Cancer Society, everybody was going to start
- 16 to come in and really tear at this technology.
- 17 And the fact that Vello Norman, who is very
- 18 much involved in the technology, is now a naysayer, or
- 19 critical, only underscores my belief, you know, that
- 20 that process was going to be a crucible -- a crucible
- 21 process as to whether this technology made any sense
- 22 or not.
- 23 Now, in 1984 I was not aware of this
- 24 document, I was not aware that Vello was doing these
- 25 sorts of the things. It makes me believe that I was  $\,$  05721  $\,$
- 1 absolutely right in my analysis back in '78 saying
- $2\ \mbox{that}$  this was really going to be a crucible period for
- 3 this technology.
- $4\,$  Q By the way, in that same document you are
- 5 telling the jury about where you talk about the
- 6 crucible test of vetting, you also said in there you
- 7 actually thought this product might have health
- 8 benefits for people?

9 A Honestly, everybody I talked to, I mean 10 everybody I talked to said that to me. No one -- I 11 mean, I feel like maybe I was in the dark. But the 12 fact is everybody I talked to all said that it was 13 going to be the biggest thing since sliced bread, 14 depending on whether you like sliced bread. 15 Q Are you now learning in this courtroom, as we 16 look at these documents, that maybe it wasn't going to 17 be the second coming of sliced bread? 18 MR. FERGUSON: Argumentative. 19 THE COURT: Sustained. 20 THE WITNESS: It --THE COURT: Excuse me. 21 question is before 22 you. THE WITNESS: No question. This 23 is a 24 different role for me. BY MR. WEBB: 05722 Q Let's go on and look at what is said in this 2 document. 3 This scientist at Liggett, Mr. Wallack, it 4 says Philip Morris has been issued a number of patents 5 or methods for denitrating tobacco, specifically in 6 the preparation of reconstituted sheets for tobacco 7 use. 8 Now, this is what Dr. Farone told the jury 9 about last week, about Philip Morris was trying to get 10 nitrates out of cigarette smoke. Did you -- did you 11 know back at that time in 1978, 1979 -- did anyone at 12 Liggett tell you that at the same time while Liggett 13 was adding nitrates into tobacco, other companies were 14 trying to take it out in order to make cigarettes 15 safer? A Actually we had a discussion, because 17 interestingly enough the comparative test was always 18 Marlboros, because that was the number one 19 and there was discussions about the fact that Philip

20 Morris was in fact trying to reduce the levels in 21 Marlboro, because I think -- as I recall, Marlboro 22 were actually higher than the XA cigarette. And here 23 is the number one cigarette with higher levels than 24 the XA project. And I was told specifically that 25 Philip Morris was working on reducing those levels. 05723 1 But that is now in 1978, remember. That is not '84. 2 Q That's fine. I am talking about 1978. 3 When you found out that another cigarette 4 company was actually trying to get nitrates out of the 5 cigarette to make it safer, did that at least cause 6 you to pause and hesitate and say to yourself, why is 7 Liggett adding it in if someone else is trying to get 8 it out? 9 A Truthfully, it convinced me I was right. I 10 was the person telling them they couldn't do it the 11 way they were trying to. It made me more concerned 12 than ever that they disclose exactly what they were 13 doing. 14 Q Disclose to anyone who bought it increase in 15 the oxides of nitrogen may be a health risk for them? 16 A Yes. 17 Q By the way, when you told Liggett that if you 18 are going to sell this product you are going to have 19 to actually warn people of the fact that you are 20 adding these nitrates in and creating all these oxides 21 of nitrogen, it will be dangerous --22 A May. 23 Q May be dangerous to yourself. Did Liggett tell you they might have trouble 25 selling that product to smokers? 05724 1 A Liggett thought that they were going to sell 2 more cigarettes than the world could produce palladium 3 for them to produce. 4 Q We will -- I will get to that a

- little bit
- 5 later. Let's go on and finish this document.
- 6 It says, recent papers have indicated a
- 7 growing concern for levels of nitropolycyclic
- 8 aromatics in air pollution, automotive exhausts and in
- 9 tobacco smoke. Many of these nitro PCAH compounds
- 10 have been determined to be highly carcinogenic, often
- 11 more so than the parent PCAH. It says, we have not
- 12 looked for this class of compounds in our smoke
- 13 fractions, and I would expect them to be present to
- 14 suggest -- I'm sorry, but I would expect them to be
- 15 present to a greater extent in the higher nitrate
- 16 cigarette smoke. I suggest that we do some studies on
- 17 the extraction, identification and quantification of
- 18 these compounds in our smoke fractions.
- 19 Do you see that?
- 20 A Yes.
- 21 Q Now, you just told the jury a moment ago that
- 22 you understood Liggett had already done some type of
- $23\ \mbox{fractional}$  analysis of the PCAHs in order to determine
- 24 that it was reducing, or somehow the quality of the
- 25 PCAHs was better in the XA product? 05725
- 1 A They clearly had done some. I mean, they
- 2 evidently, according to this scientist, had not done
- 3 this specific one, but they clearly had done some,
- 4 because I saw those  $\operatorname{--}$  I saw those papers at the time.
- 5 I didn't understand them completely. But
- $\ensuremath{\text{6}}$  back to whether or not it is the PCAH level or the
- 7 character of the PCAHs.
- 8 Q And this memo is suggesting in 1984 that the
- 9 character of the PCAH in this cigarette may actually
- 10 be worse for humans?
- 11 A If this fellow is right, there is another
- 12 issue of whether or not this particular nitro PCAH
- 13 compound has been properly identified and

has been 14 measured in the XA project. What astonishes me about this, in 1984 I am 16 surprised they even had -- unless they have were doing 17 this for the record, I am surprised they even had any 18 activity on XA at all. 19 Q Actually -- you can see from this document 20 Liggett in 1984 is still pursuing the XA -the 21 project? 22 A Apparently. 23 Q You didn't know that? 24 A I think I testified I did not know 25 happened to this project after my direct involvement. 05726 1 Q Here is what I want to ask you. I take it, 2 by the way, this man who is a scientist who states 3 here in this Liggett document that he actually expects 4 this particular component of PCAH to be higher in the 5 XA cigarette --6 A He expects that in a high nitrate cigarette 7 you might see more of that nitro PCAH compound. 8 Q We know the XA was a high nitrate cigarette? 9 A That's right. Q And so this problem is raising a 10 question as 11 to whether these PAHs that were being reduced -- even 12 the PAH reduction may be creating another problem in 13 this product. At least that's what this scientist is 14 saying? 15 A Right. And the reason I am having trouble 16 with this is, I know that I see at the time that 17 Marlboro is higher in nitrates than the XA project, 18 and if that is true -- and I'm not sure that 19 that as true or accept this as true. It would mean 20 Marlboro, which is the number one cigarette, is more 21 dangerous than the XA project, and this is all 22 premised on whether the XA would sell. They are all 23 saying it will sell.

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I am saying you can't sell it
without add --
25 when you add nitrates without disclosing,
even though
05727
1 it is lower in nitrates than the number one
cigarette.
 2 Q Now that you see that, does this
cause you to
 3 pause and hesitate on your conclusion it
might have
 4 had health benefits?
 5 A It might have been the number one
cigarette,
 6 but it does make me wonder about these other
issues
 7 that were not discussed at the time.
8 Q I take it as a lawyer you did not
want to be
9 part of any plan to get the FTC to allow
Liggett to
10 market a cigarette that in fact would be
more
11 dangerous for people?
12 A I wanted to do exactly the
opposite. I
13 wanted to make sure that before this product
went to
14 market everybody had a shot at it.
15 Q Let's see what this scientist
concludes on
16 the next page.
17
   This Liggett scientist, Dr. Wallack
says, all
18 of these references point toward the
desirability of
19 reducing the levels of nitrate in tobacco
intended for
20 a smoking product.
21 Do you see that?
22 A Sure.
23 Q That's the exact opposite of the
XA
24 cigarette?
25 A Well, as you pointed out, the XA
doesn't work
05728
1 unless you add nitrate.
 2 Q So this is the exact opposite?
 3 A Yes.
 4 Q He goes on to say, and I believe
we should
 5 give serious thought to the ramifications
of
 6 introducing such a product.
7 A Yes.
8 Q You did not know that back in
1978 when you
9 were going to go to the FTC, did you?
10 A Did not know --
11 Q You did not know -- strike the
question.
   Back in 1978, when you were
```

going to go to 13 the FTC, were you aware of any Liggett scientist that 14 was suggesting that it is crazy to increase nitrates, 15 we should be going the other direction? 16 A No, I certainly wasn't aware of it. 17 Q Now, we saw in that one memo -so the jury 18 understands, the problem with adding nitrates doesn't 19 stop with NO, oxides of nitrogen. Adding nitrates 20 also increases nitrogen dioxide, is that correct? 21 A Yes. 22 Q And you were aware when you were -- when you 23 were working on this project, you were aware that 24 nitrogen dioxide is very toxic and can cause cancer? 25 A Probably. 05729 1 Q Well, let me show you a document, then. 2 A You said I was aware. Q I am asking you if you were aware and you 4 said probably. 5 A I said probably. But I don't recall a 6 specific discussion about nitrogen dioxide. 7 Q You don't remember that. Didn't you expect 8 or want Liggett to at least tell you about all the 9 potential dangers of this product that you were going 10 to go talk to the FTC about? 11 A I did expect them to have a discussion with 12 me. And I thought that disclosure of the nitrates 13 that were being added in the process would lead to 14 that debate. And you are asking to a specificity level 16 that it would be unfair for me to suggest that I sat 17 around with these guys and talked about nitrogen 18 dioxide, as opposed to nitric oxide, or any of the 19 other compounds of nitrogen. It was just a general 20 discussion. When I say probably, there was probably a 21 discussion of nitrogen dioxide, but I don't really

- 22 have a recollection of that.
- 23 Q And I recognize that you were taking
- 24 information that was given to you by your client, but
- 25 as a lawyer you have an obligation yourself to inquire 05730
- 1 to underlying information that your client may not be
- 2 providing you, is that fair to say?
- $3\,$  A Sure. To the extent that I understand that
  - 4 the problem, yes, that's right.
- 5  $\,$  Q Before you went to the Federal Trade
- 6 Commission and tried to become an advocate for this
- 7 product, did you think you had an obligation to look
- $\boldsymbol{8}$  into the science, at least to understand what the
- 9 dangers are?
- 10 A Counsel. Advocate for the product is unfair.
- 11 What I have tried to say in a thousand different ways,
- 12 I was an advocate for them looking carefully at what
- 13 was presented here, so that we could have a discussion
- 14 about whether or not the FTC would object
- 15 product going to market. Big difference.
- 16 I wasn't an advocate for the
- product. I was
  17 an advocate for a process. A process in
  which we vet
- 18 this subject fully and see whether or not
- it can go to
- 19 market. And that's why, when you read these memos,  ${\tt I}$
- 20 hope you see, when I say to someone who has already  $\,$
- 21 got a planned promotional campaign, and when I say to
- 22 executives who expect the product on the market in
- 23 January of '79, that you can't do it, that I am not an
- 24 advocate for the product, I am an advocate for the
- 25 process. And there is a big difference to  $\ensuremath{\text{me}}\xspace.$
- 05731
- 1 Q As far as the product is concerned, Liggett
- 2 recognizing that the nitrates are a huge problem, they
- 3 tried to solve the problem by creating a new filter,
  - 4 is that correct?
- 5 A That's my understanding.

6 Q But you learned that filters only can do so 7 much after you increase nitrates that much, is that 8 correct? 9 A Well, that's right, I think. 10 Q Okay. Let me show you a document that is in 11 evidence. I will hand to you what is marked as State 12 Exhibit 6056 in evidence. I will show it to the jury. This is a Liggett memo, is that correct, sir? 14 A Yes. 15 Q And I think the date is twelve --December 8, 16 1975, sir. Do you see that? 17 18 A Yes. 19 Q Again, this is to Dr. Mold by scientist Vello 20 Norman. 21 Do you see that? 22 A Yes. 23 Q I am going to just show you -- the subject 24 matter, at least on the first page, he is talking 25 about what kind of compounds can we selectively 05732 1 substantially eliminate from smoke in light of what we 2 know about smoke chemistry and filtration mechanics? 3 Do you see that? 4 A Yes. 5 Q I want to turn to the next page. I want to 6 talk about these -- the two products that we have been 7 talking about, nitric oxide -- the nitric oxide and 8 oxides of nitrogen are the same, do you understand 9 that? 10 A I'm sorry. I didn't hear your question. 11 Q You understand that oxides of nitrogen, NO, 12 is the same as nitrous oxide? 13 A Yes. 14 Q I want to look in here -- it says, if we are 15 talking about the oxides of nitrogen, says relatively 16 moderate concentration in smoke, however the 17 concentration is a function of the nitrate level in 18 the blend. We have other reasons for wanting to

19 elevate the blend nitrate content. 20 And he cites the Biores test project, do you 21 see that? 22 A Yes. 23 Q That was another name for the XA project, 24 wasn't it? 25 A Yes. 05733 1 Q He says, and hence, NO removal assumes 2 considerable importance. We have some selective 3 filters for NO, however none are more than fifty 4 percent efficient at present. 5 A Yes. 6 Q And it goes on to talk about nitrogen 7 dioxide, which is also created by these nitrates, is 8 that correct? 9 A Right. 10 Q Nitrogen dioxide, he says, low concentration 11 in smoke, and it is difficult to assess analytically 12 just how much is there because of its very reactive 13 nature. It could be a problem in high nitrate blends. 14 Recognized as a very toxic material and has 15 implications in carcinogenicity. 16 Do you see that? 17 A Yes. 18 Q Little work has been done on it, apart from 19 its co-occurrence with nitrogen, NO. NO is converted 20 slowly to NO2 in air. This is potentially a fruitful 21 area for work. 22 Now, my question is, when you began to work 23 on this project, the XA project, were you -- did 24 anyone at Liggett discuss with you their view as to 25 whether they would be able to develop an effective and 05734 1 safe filter, that whatever removed or reduced the 2 nitrates down to, let's say, an insignificant level in 3 the smoke? A No, I can't answer the question quite that 5 way because there was a lot of discussion about the 6 fact that they could reduce the level of nitrates, but

- 7 it would only be to a level comparable to the leading
- 8 brands. And what this does -- and, again, I hadn't
- 9 seen this document, I mean, in years. I don't know --
- 10 it says my name on it. I guess I saw it in September.
- 11 But what I thought at the time, and you think
- 12 about these subjects twenty years later -- and I use
- 13 this illustratively. What I was always impressed with
- $14\ \text{was}$  when you went through this list of contents, and I
- 15 didn't remember the nitrogen dioxide discussion
- 16 specifically, but I always remember the hydrogen
- 17 sulfide discussion. Because hydrogen sulfide was
- 18 described as something that really hadn't been a lot
- 19 of focus on but that it was incredibly
- 20 So you -- when you look at what happened
- 21 with the XA project, what happened to hydrogen
- 22 sulfide, it is so much lower than the low tar
- 23 cigarettes in the top ten brands, it was the sort of
- 24 thing in my mind always sort of underscores why
- 25 everybody was excited. Nobody knew exactly what the 05735
- 1 cigarette did or didn't do.
- 2 It probably did some things that were poorer
- 3 than the conventional brands. It reduced tumors.
- 4 arguably, but then you got to something like this on
- 5 hydrogen sulfide and it looked like it was a
- 6 breakthrough product. And that's why I was
- 7 advocate for the process. Let's see what it does and
- 8 doesn't do.
- 9 And when you take things like this -- and I
- 10 am trying to agree with you. Obviously there are
- 11 problems with the XA, or there were potential problems
- 12 that had to be addressed. And to answer your question
- 13 specifically, the filter technology was only described

14 as something that would get it down to barely 15 acceptable levels. And they were shooting to get it 16 lower than a Marlboro. 17 Q Well, in fact when Liggett decided to find a 18 filter that could reduce the nitrates down to even 19 that level, they had to use another toxic compound 20 called cobalt in the filter, didn't they? 21 A I think at one time they played with that, 22 yes. 23 Q Let's talk about that. So Liggett, in order 24 to get the nitrate level down -- by the way -- strike 25 that question. 05736 1 So the jury understands, Liggett never had 2 actually developed an XA cigarette, it kept 3 experimenting with different formulations of what the 4 cigarette might look like some day, is that correct? A Well, the cigarettes that I described, I 6 guess yesterday, that I smoked, I thought were what 7 they had finally decided upon. These are the ones 8 that I couldn't distinguish between a Marlboro. The 9 reason they use Marlboro, it wasn't to pick on Philip 10 Morris, it was because it was the number 11 cigarette. The fact is I thought that was the final 12 production cigarette. I thought at one point they had 13 produced a million or so of those cigarettes, so that 14 I would have those cigarettes to give to the trade 15 commission. 16 They expected that some of the people who 17 smoked at the trade commission would actually try the 18 cigarette. So in addition to this booklet, I would 19 bring them a carton of cigarettes or two. I thought 20 they had -- counsel, I thought they had a final 21 cigarette. Q Wasn't Liggett still fooling around with the

23 formula in 1984? 24 MR. FERGUSON: Objection. Foundation. 25 THE WITNESS: I don't know the answer to 05737 1 that. THE COURT: Sustained. BY MR. WEBB: 4 Q Let me stick with the filter for a minute. 5 If I need to show you some documents, I will. I want 6 to see what you remember. Do you recall when you were working on this 8 XA project that when Liggett decided to develop a 9 filter that would try to address the nitrate problem, 10 that the filter it eventually developed had cobalt in 11 it? 12 A I remember a discussion of that. 13 Q And do you remember a discussion that cobalt 14 itself is another toxic substance? 15 A Yes, I remember that. 16 Q In fact, do you remember that the Liggett 17 patent, the patent we looked at where Liggett had 18 developed the XA technology, the patent stated on its 19 face that cobalt was too toxic and not recommended to 20 be used in the XA technology? 21 A I remember that. 22 Q Did it strike you as odd that Liggett, in 23 trying to solve the nitrate problem, then added cobalt 24 into the product which the patent said was too toxic? 25 A Well, it didn't strike me as odd, because 05738 1 remember the patent is based on the addition of 2 another toxic metal, and that is palladium. 3 words, if it takes that kind of catalytic activity in 4 order to achieve a result, it didn't surprise me. But 5 it underscored, once more, the importance of this 6 inhalation testing and any other testing that it might 7 have been engulfed in. 8 Q By the way, all that material you were going 9 to take to the FTC, does that -- did

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Liggett do any
10 testing of the cobalt filter, do you know?
11 A No. And I don't know the answer
to the
12 Southwestern Institute's final report. I
had been
13 told -- I can tell you, I had been told at
the time
14 that the final inhalation studies would
give us trace
15 metals or trace materials on all of these -
- on all of
16 these issues, palladium, cobalt, et cetera.
I don't
17 know whether or not they in fact did. That
report I
18 remember being -- I remember being shown
that report
19 sometime well after I was not involved.
Maybe '81 or
20 '82. But I don't remember that.
21
   MR.
WEBB: I will stop.
22 THE
COURT: We will take a
break. We will
23 see you at 1:30.
 (Luncheon
recess.)
2.5
05739
(Afternoon
session.)
 2 (Jury
not present.)
 3 MR. FERGUSON: Your Honor, we
mostly wanted
 4 to give you a heads up. Mr. Meyer is
available
 5 through the rest of today. He is a board
member of
 6 the Hockey Hall of Fame. He has meetings
 7 irrevocably committed to Monday and
Tuesday. Mr. Webb
 8 doesn't have an objection if Mr. Meyer
needs to be
 9 recalled sometime after Monday and
Tuesday, we can
10 work that out.
11 I wanted to let the Court know
that. And I
12 was hoping we could get some kind of
indication of the
13 likely time the rest of this would take.
14 MR. WEBB: I will do everything I
can to
15 finish this afternoon. I just sat down
over the lunch
16 hour and went over the areas I have to go
through. I
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17 still have a fair amount to go. I told Mr. Ferguson 18 before the break I was roughly estimating an hour and 19 a half. I may be off. It may be two hours. I have 20 taken areas out. 21 I told Mr. Ferguson if we don't finish today 22 with the complete examination, I understand the 23 courtesy the witness, Mr. Meyer, needs, and bringing 24 him back on Wednesday or Thursday of next week, I can 25 work that out with Mr. Ferguson. 05740 1 MR. FERGUSON: I haven't asked Mr. Meyer his 2 availability on those dates. I would like to get him 3 finished today, if we possibly can. 4 THE COURT: Let's find out if there is an 5 issue. It sounds like there is a significant 6 possibility that we won't get him finished today. 7 What is your availability next week? 8 THE WITNESS: I will be in Toronto, your 9 Honor. I think it is fair to say -- I know that 10 Wednesday doesn't work. My question would be 11 Thursday. And I can look at that. I am supposed to 12 be in Philadelphia and New York. If I have to come 13 back, I will make arrangements to come back at your 14 direction. And Thursday is a possibility, perhaps the 15 next week. I think the next week may be Thanksgiving 16 week, and that may be a problem. If I have 17 cross for that long, I will do what I can to give them 18 some alternative dates. 19 THE COURT: One day is more than enough. 20 What's your position? 21 MR. WEBB: I was going to say, the thought 22 struck me, if we get started and things go well and we 23 are down to -- we have to go like an extra half hour 24 today to finish him, if you your Honor wants to do 25 that, and the State wants to, I am not

opposed to 05741 1 that. That may not be acceptable to the 2 THE COURT: We will go a half hour. What you 3 have outlined may require more than that. 4 What is the total expected crossexamination, 5 if any, of the other defendants? 6 MR. McCORMICK: For my clients I 7 expect -- obviously, I will wait and see what Mr. Webb 8 does and where we are at the end of his examination to 9 see what we will do. Under the most expansive 10 interpretation it would be a half hour. And I believe 11 actually it will be considerably less. 12 THE COURT: Others? 13 MR. KACZYNSKI: Your Honor, as of right now 14 R.J. Reynolds doesn't have any questions. 15 MR. SCHIFFERMAN: None from Lorillard at this 16 time. 17 THE COURT: Okay. Let's get started. And I 18 hope we can conclude this afternoon. 19 We do have the issue of the scope 20 cross as related to the warnings for the 21 advertisement. You suggested that we do that at the 22 afternoon break, but here we are. 23 If you are ready to go -- I understand there 24 won't be more briefing. 25 MR. McDERMOTT: The only point I would make, 05742 1 your Honor, that is the jury's time. We can do it 2 when the jury is on break, if that is satisfactory. 3 We can do it now if you like. THE COURT: It is, but we have other people, 5 including the reporter. I don't know if there is a 6 backup here for the reporter. I am content to wait 7 for the break and see if we can focus it and maybe 8 take a shorter break. Let's go ahead and get the jury working. 10 (Jury present.) 11 THE COURT: Please continue. 12 MR. WEBB: Thank you, your Honor.

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13
   BY MR. WEBB:
14 Q Mr. Meyer, I want to pick up
where we left
15 off right before the lunch break. I was
asking you
16 about the issue that Liggett, in order to
try to deal
17 with this nitrates problem, we had
established that
18 you recalled Liggett had developed a filter
that used
19 cobalt, is that correct?
20 A Yes.
21 Q In connection with you going to the
Federal
22 Trade Commission and doing work for Liggett
23 connection with the Federal Trade
Commission, did any
24 scientist, or anyone from Liggett ever tell
you that
25 Liggett at one point in time had determined
that
05743
1 cobalt was too toxic to be used in a
cigarette
 2 product?
 3 A I recall some discussion of that.
I mean,
 4 how specific I can't say.
 5 Q When you learned this issue --
strike that
 6 question.
   Did you also learn that because
cobalt was
 8 toxic, that Liggett was concerned and
worried that the
 9 cobalt would then be transferred into the
smoke that
10 would be inhaled into human lungs if they
smoked the
11 product?
12 A I can't answer that question. That
13 specific than my recollection.
14 Q Well, first of all -- I am going to
show you
15 a document so we can discuss the issue.
am going to
16 now give you what is in evidence as State
17 6057. It is a long document. And I only
want to talk
18 about one page.
    Just so the jury sees what I have
shown you,
20 this is a document, which I think I showed
you
21 earlier, it is a memo to Dr. Mold by these
two other
22 scientists at Liggett, dated April 1, 1975.
23 about the agenda for discussion of plans for
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marketing 24 a biologically approveable cigarette. And we read off 25 the first paragraph this morning. 05744 1 Do you remember that? 2 A Yes. Q Now, the page I want to go to that talks 4 about the filter is page 6. If you will go to page 6 5 of this document that is marked as State Exhibit 6057. 6 Let's see what the Liggett scientists say about this 7 filter. It says here, the filter, which we 8 will 9 expect to use to trap oxides of nitrogen, will contain 10 salcomine. Salcomine is a complex of cobalt 11 won't attempt that word, but you see it there? 12 A Yes. 13 Q And may itself give us a problem. Since 14 salcomine is a powder, some transfer of salcomine into 15 the smoke is likely, according to these scientists. 16 Do you see that? 17 A Yes. 18 Q We cannot at this time provide data for the 19 transfer of salcomine or cobalt into the smoke. 20 Do you see that? 21 A Yes. 22 Q Now, do you remember at the time you were 23 going to go talk to the FTC, do you remember being 24 told by Liggett that another problem that we have to 25 deal with and we ought to tell people about is that if 05745 1 the cobalt seeps into the smoke, and then 2 humans lungs, that that could be another health 3 problem. 4 Did you have any discussions about that? 5 A I actually thought we talked about that this 6 morning. My only recollection is that there was going 7 to be a report -- an eventual report from 8 Southwest Institute on whether or not trace

9 indications of cobalt showed up in the 24month 10 inhalation study. There was some discussion, but I 11 don't have any more recollection than that. That 12 problem was going to either be addressed positively or 13 negatively in the Southwest Institute report. 14 Q Well, the report that Liggett gave you to 15 present to the FTC, the collage of documents that are 16 part of State Exhibit 4061. Is there anywhere in all 17 these documents -- did Liggett disclose in these 18 documents at least a problem? 19 A No, I don't think so. 20 Q Do you think that is something the Federal 21 Trade Commission or the public health community should 22 know about as far as vetting and discussing the 23 dangers of this product? 24 A Yes. The answer is yes. 25 Q I want to come to the end of the nitrate 05746 1 story. Am I correct, sir -- did you eventually learn 2 that over the next several years -- strike the 3 question. Sometime in 1979, I believe, you testified 5 Mr. Greer told you not to go to the FTC at that time? 6 A In a formal way, yes. 7 Q You said he called you on the telephone? 8 A He told me not to go formally. 9 Q Not to go formally to the FTC? 10 A Right. 11 Q Because you already had some informal 12 contacts? 13 A Yes. 14 Q Now, my question is, after that you continued 15 to work for Liggett up until 1986? 16 A Sometime, '86, early '87 perhaps. 17 Q Did you learn and have discussions with 18 Liggett personnel and learn that Liggett, after they 19 told you not to go to the FTC, that Liggett continued 20 to test different versions of the XA cigarette and 21 still could not solve the nitrate problem?

22 A No. The only discussions I had about the XA 23 project that I recall were with Mr. Greer before his 24 death. I don't recall that. 25 Q Let me show you a document that is in 05747 1 evidence. It is -- it is Defense Exhibit AS001299. 2 I am going to hand it to you. I don't think you have 3 seen this one before, Mr. Meyer. And I am going to 4 put this on the screen for the jury. This document is dated May 4th, 1984, is that 6 correct? 7 A Yes. 8 Q Now, if we look at this document, it is a 9 document to a Mr. Montague from, I believe it is Dr. 10 Hilliard and Dr. Wallack. 11 Do you see that? 12 A Yes. 13 Q Were those scientists at Liggett? 14 A Well, we saw Dr. Wallack's name on another 15 memorandum. I don't know Montague and I don't know 16 Hilliard. 17 Q In any event -- this is 1984. They are 18 talking in this memo about a timetable, status on 19 project XA. The front page I am talking about. 20 A Right. 21 Q Do you see that? 22 A Right. 23 Q Now, what I want to call to your attention 24 is, in this document here they start right in the 25 first paragraph, under Product Development, in May of 05748 1 1984 Liggett is saying the following. Cigarettes in 2 the seven to eight milligram tar range, and then they 3 put in parentheses 85 and 99 mm, have been developed 4 that deliver acceptable taste properties. However, 5 the oxides of nitrogen, NO, in smoke are quite high. 6 In the case of the 85 mm prototype -- now, a prototype 7 is simply an experimental cigarette, is that correct,

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8 sir?
 9 A Yes.
10 Q In the 85 prototype, NO, oxides of
11 is 61.5 percent higher than the average
delivery of
12 eleven commercial products, and in the 99
13 whatever, mm, prototypes, nitrogen of oxide
is 107.22
14 higher than the average delivery of seven
commercial
15 products.
    Delivery of nitrosamines and PCAHs
16
are not
17 presently available.
18 Now, do you see that, sir?
19 A Yes.
20 Q Now, does that indicate to you
that even as
21 of 1984 it appears that Liggett has still
not solved
22 the problem of the nitrates being too high,
creating
23 too many oxides of nitrogen in the
cigarette smoke?
24 A No, that is not what it indicates
to me. It
25 indicates to me that the situation is
essentially the
05749
1 same in '84 as it was back in '78 or so.
And that is
 2 -- and I believe this to be the case, that
the nitrous
 3 oxide or the nitrates that show up in the
XA project
 4 or the new cigarette are about the same
as Marlboro
5 and some others, but still much higher
than the more
 6 popular brands or lower-tar brands,
nothing is more
 7 popular than Marlboro.
 8 So what it shows me is they
haven't changed
 9 anything at that stage. And honestly, that
is as far
10 as I can go in trying to be helpful,
because I was not
11 involved in these discussions. I don't
know what was
12 going on with this development. I don't
know whether
13 this was litigation related, I don't know
whether -- I
14 just don't know. I wasn't involved.
     Q Okay. At least, these scientists
are saying,
16 at least in their judgment the oxides of
nitrogen in
17 smoke are quite high?
18 MR. FERGUSON: Asked and answered.
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No
19 foundation.
20 THE COURT: Go ahead and complete
your
21 question.
22
    BY MR. WEBB:
      Q Sir, I am asking, these scientists
23
at least
24 were of the view that the oxides in these
two test
25 prototype cigarettes they say are quite
high, on the
05750
 1 face of this document?
 2 MR. FERGUSON: Same objection.
 3
   THE COURT: Overruled.
 4 THE WITNESS: I think, Counsel,
that I would
 5 have said they were quite high -- I believe
T said
 6 they were quite high in some of my informal
 7 discussions. And I think this chart on
nitrous oxide
 8 says they are quite high on page LDM89. So
I don't
 9 know whether or not quite high is different
than it is
10 now, in '78.
   BY MR. WEBB:
11
     Q This morning you agreed with me
that Liggett
13 needed to solve the nitrate problem before
14 product went into the marketplace, is that
correct?
     A That's right. When they added
15
the nitrates
16 they had to do something to reduce
nitrates down to
17 the level of this table or they never
would have
18 gotten to market, that's right.
thought, in
19 fairness, that they had solved that
problem to an
20 acceptable level, because after all,
they got them
21 below a Marlboro.
22 But I don't know whether now this
quite high
23 reference in '84 means that it is either
higher or
24 lower. It probably means it is still as
high as in
25 1978. It would be misleading to say that I
didn't
05751
 1 think they had solved the nitrates problem,
because I
 2 thought they had by the filter technology
and the way
 3 in which they had processed the tobacco
back in '78.
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- 4 Q Just so I understand what you are saying, are
  5 you saying even if this cigarette is delivering oxides
  6 of nitrogen at 107 percent higher than say seven other
  7 commercial products, that this is a safer cigarette?
- 8 A I am saying if this chart is correct, the one
- 9 we looked at this morning, LGM89, and the nitrous
- 10 oxide is really about the level of the top ten brands,
- 11 higher than some, lower than some, and higher than the
- 12 low-tar brands -- and it looks to me like if you took
- 13 the top cigarettes, 107 percent is about the right
- 14 measurement here, that because of the other potential
- 15 benefits of this process, that this is something worth
- 16 considering.
- 17 And I think those numbers are probably the
- 18 same numbers you would get if you took the seven
- 19 brands that are referenced there and referenced them
- 20 as in here. There is no question that the nitrates
- 21 were on the high side, but they were still below the
- 22 number one cigarette. That's all I am saying.
- 24 the number one cigarette?
- 25 MR. FERGUSON: Objection.

Argumentative.

05752

- 1 THE COURT: Overruled.
- 2 THE WITNESS: I know that in stuff that I saw
- 3 at the time Marlboro was higher. And somewhere a
- 4 document exists Marlboro is higher in nitrates, I
- 5 believe, or nitric oxide, than the XA cigarette. That
  - 6 was also somewhat satisfying to me.
- 7 BY MR. WEBB:
- 8 Q Can you identify that document for us?
- 9 A Can I identify?
- 10 Q Yes.
- 11 A No, it is a document I saw in 1978.
- 12  $\,$  Q You have not seen it recently in what the
- 13 State has shown you?

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14 A I don't recall -- I don't recall -
- I recall
15 seeing the Southwest Institute study, the
final report
16 in '81. That, of course, is not in here.
But I don't
17 think that has anything to do with
nitrates. I
18 noticed that that was the palladium
residual issue. I
19 don't recall whether or not I have seen it
in the last
20 -- since September or not. I know that I
saw it in
21 '78.
22 Q Can you identify -- who prepared
the
23 document?
24 A It is a document that purports to
25 Liggett document with these names on the
chart
05753
 1 unmasked. In other words, those top
brands there, I
 2 saw a document that has the brands'
names, the
 3 various, Winston, Marlboro, et cetera,
somewhere.
 4 Q But you can't identify --
 5 A I don't have it. And, you know,
I haven't
 6 seen it today, and I certainly haven't
seen it in my
 7 formal testimony.
 8 Q And have you -- strike the
question.
    Let's go on. As far as these
 9
are too high
10 and whether they solve the problem, let's
see what
11 they say they want to do. This is now
1984. It says
12 here, you see where it says we plan to make
another
13 sample run within the next two weeks?
14 A Yeah, I see that.
15 Q Do you see where I am reading? We
plan to
16 make another sample run within the next two
weeks.
17 The purposes for this run are, refine
application of
18 catalyst and magnesium nitrate, number 2,
reduce the
19 delivery of NO in smoke.
20
   Do you see that?
21 A I see that.
22 Q Does it appear to you at least by
looking at
23 this document that Liggett still in 1984
24 struggling with this nitrate problem trying
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to find a 25 way to reduce the oxides of nitrogen? 05754 1 A I can only answer to the way I did, Counsel. 2 I would like to give you the shortest answers as 3 possible because of my time schedule, but what I 4 recall is nothing about this memo because I didn't see 5 it at the time. I don't know what they were doing or 6 whether it was litigation related. My only discussion 7 in this time frame was with Greer with the cigarette. 8 And yes, based on this document, on its face it looks 9 like something is still going on in terms of product 10 development. 11 Q Thank you. Let me move away from the 12 technology of the XA cigarette and move on 13 different subject. As far as what was actually going 14 on in Liggett as far as developing this product --15 setting aside this technology for a moment -- do you 16 agree that Liggett's own internal severe financial 17 problems in the late 1970s was interfering with 18 Liggett's ability to devote resources to developing 19 the XA cigarette technology? 20 A Yes. 21 Q And so the jury understands, and maybe we can 22 go through this pretty quickly, am I right in the late 23 1970s, while you were working on the XA project, 24 Liggett was experiencing severe financial problems 25 throughout that period, is that correct, sir? 05755 1 A Yes. 2 Q And the financial condition of Liggett was so 3 bad as a company at that time it was on the verge of 4 being sold at a very low bargain basement price to 5 various interested investors, is that correct? 6 A That's what I thought, yes. 7 Q And you agree, do you not, that the key to

8 the success of the XA technology was the effort that 9 would be put into it by the scientists in the research 10 and development problem? 11 A Yes. 12 Q And, however, you were aware in the 1970s 13 that Liggett's own research and development budget was 14 being cut because of the financial problems, is that 15 correct? 16 A That's my understanding. 17 Q And you were aware that in the late 1970s --18 late 1970s when you were involved with XA, that 19 because of Liggett's financial problems Liggett was 20 reluctant to finance the type of additional 21 independent laboratory testing that would need to be 22 done in order to confirm the mouse skin painting tests 23 done by A. D. Little? 24 A I would say yes. 25 Q And Liggett -- you were aware and Liggett was 05756 1 aware, to your knowledge, that the XA cigarette to 2 have credibility, scientific credibility, in order to 3 be accepted by the scientific community as you vet 4 this in the world out there, that Liggett was going to 5 have to go out and hire another independent laboratory 6 to confirm the tests that were done by A. D. Little, 7 is that correct? 8 A That was certainly a real possibility, if we 9 were looking for ultimate credibility. 10 Q Okay. I take it if you were going to 11 ultimately market the product -strike the question. 12 From what you told the jury, if you as a 13 lawyer for Liggett were going to be able to 14 successfully go out and talk to the FTC and the 15 surgeon general and deal with what would be a vetting 16 and probably a lot of resistance, you were going to 17 need the best scientific case to

support your position 18 that you could get, wouldn't you? 19 A No question. 20 Q In fact, specifically, one example of 21 Liggett's financial problems impacting their ability 22 to develop this product was that you became aware in 23 the late 1970s that Liggett actually had meetings with 24 Dr. Gori, Gio Gori of the National Cancer Institute, 25 is that correct? 05757 1 A Yes. 2 Q And you became aware as the lawyer for 3 Liggett that Liggett wanted the National Cancer 4 Institute to do its own independent testing --5 A True. 6 Q -- of XA to confirm the results that A. D. 7 Little had obtained in order to give the product 8 credibility, is that correct? 9 A There is no question that one of the benefits 10 might have been that. But it was really to include 11 the XA in some National Cancer Institute testing that 12 would have been very helpful in the debate, yes. 13 Q So that's what -- Liggett went to the NCI and 14 said, would you please test this product, is that 15 correct? 16 A Yes. 17 Q And the National Cancer Institute told 18 Liggett, we will test the product, but following our 19 normal procedure we will expect you to pay 20 for us to test the product, is that correct? 21 A I don't know if that's correct. I know that 22 Liggett did not feel that it could pay -- I recall it 23 being about a million dollars, could not pay what was 24 being asked by Gori for the XA project and whatever 25 testing that was being proposed. 05758 1 Q You found out whatever the cost was the NCI, 2 the National Cancer Institute, told

- Liggett, it will
- 3 cost about a million dollars to do this testing, and
- 4 Liggett refused to agree to that because it couldn't
- 5 -- or did not want to pay the million dollars?
- 6 A They did not pay the million, they refused to
- 7 pay the million. And obviously, when I heard about it
- $8\ \mathrm{I}\ \mathrm{was}\ \mathrm{not}\ \mathrm{happy}\ \mathrm{with}\ \mathrm{it}.$  It was explained to me, it
- 9 was more a question of not being prepared to carry it
- 10 forward formally than the million dollars. The  $\,$
- 11 million dollars doesn't -- it is not a lot of money to
- 12 a company that has already spent 13 or 15 or whatever
- 13 it was. It was explained to me at the time that it  $\ensuremath{\mathsf{T}}$
- 14 was a part of the decision -- the request from Gori
- 15 came before they were really ready to go forward more
- 16 formally with the project. It was also the money, but
- 17 it was also because of this other consideration.
- 18 Q And you said you were a little upset about
- 19 this because you recognized if Liggett was serious
- 20 about putting this product into the market and having
- 21 people like you act as their
- representatives to
- 22 convince people that it is a good product, having the
- 23 National Cancer Institute test it and find out whether
- 24 in fact these mouse skin painting tests were correct
- 25 or not would be an important thing, is that correct?
- 05759
- 1 A No question.
- 2 Q And Liggett refused to do that?
- 3 A Liggett refused at that time to pay the
- 4 million dollars. And I knew that that would be an
- 5 issue that we would have to deal with as the dialogue
- 6 went forward at the trade commission. And we would
- 7 have to revisit it.
- 8 Q But it never happened?
- 9 A It never happened.
- 10 Q And there is no one else to blame
- but Liggett

11 for that, is there? 12 MR. FERGUSON: Objection. Argumentative. 13 THE COURT: Sustained. 14 BY MR. WEBB: 15 Q Am I correct, sir, as far as this XA 16 palladium cigarette, that Liggett because of its 17 financial problems, actually made a decision in 1977 18 to sell off its palladium inventory? 19 A I don't understand the question. Let me 20 explain it this way. The project was like a roller 21 coaster, it was up, it was down, it was up, it was 22 down. I believe, and I haven't seen all the documents 23 obviously, but I believe that the inventory 24 sale you are referencing was because of the 25 series of tests, and the results on that second series 05760 1 of tests suggested that maybe the project wasn't going 2 to be as successful as they had initially hoped with 3 the first set, so they wanted to reduce the inventory. 4 And then they changed their mind when the third set 5 came in. So it was like a roller coaster. 6 Q So at some point in time Liggett sold off its 7 palladium inventory? 8 A Yes. 9 Q At least to some extent? 10 A Yes. 11 Q And that was at the time of the second MSP, 12 the mouse skin painting? 13 A That's my recollection. 14 Q Did Liggett sell off the palladium because of 15 the financial problems or just decided to get out of 16 the project? 17 A Starting with the first project, the first 18 sets of tests, remember Liggett has gone 19 company that is probably twenty percent of the overall 20 market, with a company with two percent of the market. 21 So this is a period of time, from the very 22 first day I show up in Durham where the company is not 23 a financial powerhouse.

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24 Q In fact, that is my last point,
and I don't
25 want to get into it too far, but the reason
Liggett
05761
1 was having financial problems, was because
by its time
 2 you get to the late 1970s Liggett's market
share had
 3 dropped down to a level of somewhere around
two or
 4 three percent of the market.
   Is that fair to say?
 6 A Fair to say.
 7 Q By the way, when you were
representing
 8 Liggett, you were of the opinion that the
competition
9 between the tobacco companies and the sale
οf
10 cigarettes was very vigorous?
11
   Is that fair to say?
12 A Yes.
13 Q You thought it was a very
competitive market?
14 A In the marketing of cigarettes, the
kinds of
15 positions that was going on in the brands of
16 various majors, there was intensive
competition.
17 Q As far as the story of what
happened with --
18 strike the question.
    Now, another -- beyond financial
19
issues,
20 another major issue that was faced by
Liggett in the
21 late 1970s, beyond the financial issues,
as far as
22 developing the XA product was an issue
regarding the
23 concerns, the legal concerns about
marketing this
24 product held by your friend, Joe Greer,
who was the
25 general counsel of the company, is that
fair to say?
05762
 1 A Yes.
   Q And so we will tell the jury a
little bit
 3 about that, is that Joe Greer, as you
said, was the
 4 general counsel of Liggett, is that
correct?
 5 A Yes.
   Q That means he was the chief legal
officer of
 7 that company?
 8 A Yes.
 9 Q He had the ultimate responsibility
and duty
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10 to provide his client, Liggett, with his best legal 11 judgment and advice, is that correct? 12 A Yes. 13 Q That's his job, is that correct? 14 A Yes. 15 Q You respected Joe Greer, is that correct? 16 A Yes. 17 Q And you believed that he had sound legal 18 judgment, did you not? 19 A Almost all the time. 20 Q You also believed he was honest, did you not? 21 A Absolutely. 22 Q And he worked hard, in your opinion, in 23 trying to give Liggett the best legal advice he could, 24 is that correct? 25 A I believe that to be the case. 05763 1 Q Now, what developed is we get to like 1978 2 and into 1979, Mr. Greer came to more and more believe 3 that the regulatory environment in the United States 4 was so hostile that it presented some significant 5 legal risks if Liggett decided to market this product? Is that fair to say? 7 A Yes. 8 Q He was also concerned, besides the FTC 9 problem, he was concerned about civil lawsuits, is 10 that correct? 11 A Yes. 12 Q And in fact I think you have seen this 13 document in your deposition, but at the time -- strike 14 the question. Am I correct that Mr. Greer became 16 particularly focused on these two major legal concerns 17 in the fall of 1978, and he went out and asked you to 18 become involved on the FTC side, and he went to a New 19 York law firm and asked them to become involved on the 20 civil liability side? Did I say that correctly? 21 A The only thing I would quarrel

22 Sheffield had been litigation counsel in

23 and health arena for years prior. I have

with, Webster

the smoking

done some

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24 work on other things.
25 He asked me to look at the FTC
issue, he
05764
1 asked Webster Sheffield to look at the
civil liability
 2 issue.
 3 Q I am now going to show you what is
in
 4 evidence as State Exhibit 6038. I will
hand it to
 5 you, sir, and I will put it on the screen
for the jury
 6 so the jury can see what the legal concerns
 7
   I see a date up there, 12/78. Do
you see
 8 that, sir?
 9 A Right.
10 Q That looks like December of 1978,
is that
11 correct?
12 A Yes.
13 Q And if we look here at what Mr.
Greer says --
14 and I won't try to take time to go through
this whole
15 document, but you have seen this before
recently?
16 A I saw this in my deposition.
17 Q Mr. Greer summarizes -- and that
is a two
18 page memo, is that correct?
19 A Yes.
20 Q Signed by Mr. Greer. Do you see
that?
21 A That's his signature, his
initials.
22 Q He sets forth in a pretty concise
way what he
23 sees the issue to be. I will read off what
he says.
24 He says, what legal risk does this company
take with
25 regard to governmental action and civil
litigation in
05765
 1 the event it determines to manufacture,
advertise and
 2 market the project XA cigarette, which
contains in its
 3 tobacco blend a palladium catalyst and
added nitrates
 4 which substantially reduce the biological
effect of
 5 tar on mice as proven by the mice painting
tests that
 6 reduced the number of carcinogenic tumors
appearing on
 7 the catalyst blend painted mice as compared
to the
 8 controls.
   That's his question. Do you see
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that? 10 A Yes. 11 Q And he first talks about the Federal Trade 12 Commission. And we can read that off, but 13 basically describes the same legal risks you have been 14 telling this jury about, is that correct? 15 A Yes. 16 Q That there was a significant legal risk, that 17 the FTC would eventually not allow this product to be 18 marketed, is that correct? 19 A That's correct. 20 Q He also goes on to talk about the civil 21 litigation issue. 2.2 Do you see that? 23 A Yes. 24 Q He says, the second legal risk is of even 25 greater significance than the first. Is that of 05766 1 inciting and sustaining civil litigation in the form 2 of cancer, emphysema, heart, et cetera, actions based 3 upon this company's negligence or breach of an implied 4 warranty or an express warranty. Do you see that, sir? 6 A Yes, I do. 7 Q He goes on to describe -- he is going to try 8 to reduce the risk? Do you see that? That's what he 9 says, right? 10 A Yes. 11 Q And what I want to go through, he says, in 12 order to attempt to reduce the second of the above 13 primary risks, this company engaged the services of 14 Donald J. Cohn, esquire of the law firm of Webster and 15 Sheffield, to review all advertising prepared for the 16 project XA cigarette brand. The first meeting with 17 Mr. Cohn occurred on August 10, 1978, and subsequent 18 meetings took place on August 29, September 6 and 11, 19 1978. 20 Now, the reason I show you that is that at 21 least it appears from this document that Mr. Greer 22 believed that he actually believed Mr. Cohn

to work on 23 this particular project at this time in August of 24 1978? 25 A I wouldn't quarrel with that. Don Cohn was a 05767 1 fixture. The first day I showed up at Liggett in 2 Durham Mr. Cohn was there. So whether he retained him 3 for a specific undertaking, or it was an additional 4 undertaking, no problem. I know that's what happened 5 in that August, September time frame. 6 Q All I am bringing out, is apparently Mr. 7 Greer was getting more focused to try to get the best 8 advice he could from outside lawyers on how to deal 9 with these problems? 10 A Right. And I think this document was written 11 for either presentation to Mulligan or the other 12 executives and the board. So it was something that 13 was written, focused and typed -- because board 14 members want to say, did you retain lawyers to give 15 you some help on that? That's probably why the 16 language is there. And it is a more formal memo than 17 normal. 18 Q But do you agree that Mr. Cohn was getting --19 strike that. Mr. Greer, to your recollection was getting 21 more focused on trying to get the best legal advice he 22 could on these problems as we get towards the fall of 23 1978? 24 A No question. 25 Q And he goes on to say at the conclusion --05768 1 you have already testified about this, at 2 conclusion of the above advertisement reviews, Mr. 3 Cohn, after some changes, accepted one advertisement, 4 copy attached, which is not attached to the copy we 5 have here, is it? 6 A No, it isn't. 7 Q But he says, as being possibly

defensible 8 with regard to civil cancer litigation? 9 A Right. 10 Q I won't repeat that. That is the tombstone 11 ad that no one has found, but you told the jury what 12 you remember it saying? 13 A With the Epic package on it. It was a little 14 better than tombstone, it had the Epic package. 15 Q I understand. And to go on to the next page, 16 he continues to say with regard to the first primary 17 risk -- that's the FTC, right? 18 A Yes. 19 Q He says this company on September 22nd, 1978 20 engaged the services of Lawrence G. Meyer, Esquire of 21 the law firm of Patton, Boggs and Blow to review the 22 possibility of approaching the FTC in an informal 23 manner in order to present the credibility of our 24 project XA cigarettes as a choice for concerned 25 smokers. 05769 1 Do you see that? 2 A Yes. 3 Q Now, I'm not quarreling with the date you 4 were retained, because it is of no interest. He 5 apparently thought there some date certain that he 6 asked you to work on this project? 7 A Yeah. Let's not quarrel about that. I was 8 doing this before this time frame. think Joe was 9 writing this because it wanted to look like the advice 10 he was given by Cohn and the advice he was given by me 11 was current and pointed and precise for the board. 12 Q I'm sorry. Did you actually start working on 13 the XA product before the fall of 1978? 14 A Yes. 15 Q When did you start? 16 A Well, my recollection would have been 17 sometime in '77, because I was aware sort of 18 backhandedly about the fact that the first tests were 19 great, the second tests were not so great -

- they were 20 still good in the sense that there was a fifty percent 21 reduction that we talked about, but they weren't as 22 good as the first tests, and then they sold 23 inventory, and then they didn't -- it was just them on 24 and off again roller coaster. That's the best thing I 25 can call it. 05770 1 Q I want to trace what happens over the next 2 year or so with Mr. Greer as far as legal concerns. 3 A Okay. 4 Q Now, am I correct that this gentleman that we 5 just saw his name, Don Cohn of the Sheffield Webster 6 firm, was somebody that Mr. Greer relied upon pretty 7 heavily? 8 A Yes. 9 Q And would you agree that your retention to 10 work on the XA project was for a more specific and 11 narrow purpose than was the assignment of the Webster 12 law firm, the Sheffield Webster law firm? 13 A Sure. 14 Q Well -- it's not that important. Let me just 15 ask you this. Let me just go to the meeting. Okay. 16 Tell me if I am correct, if I understand 17 testimony, at some point in time in 1979 -strike the 18 question. 19 At some point in time you started having 20 informal contacts with some representatives of the 21 FTC, is that right? 22 A Yes. 23 Q You never had a formal meeting? 24 A No. 25 Q Then sometime in 1979 Mr. Greer went to a 05771 1 meeting in New York that you were not invited to, is 2 that correct? 3 A That's right. 4 Q And as a result of that meeting, which a 5 number of people attended, Mr. Greer called you up 6 after the meeting, if I understand your

testimony, and 7 told you Liggett had decided that you should not go 8 forward at this time with the FTC meeting? 9 A That's right. 10 Q Now, I want to try to help pinpoint the date 11 of that meeting. And I take it you don't remember the 12 exact date? 13 A I do not. 14 Q Before I do, though, let me just ask you, 15 this fellow -- did Don Cohn, the lawyer at 16 Sheffield Webster firm, did Don Cohn ever tell you 17 that he was the one who recommended it to Liggett that 18 you should not meet with the FTC? 19 A I knew that the Webster Sheffield people felt 20 that it would be a real mistake to even go to the 21 point of delivering this document for the reasons we 22 discussed about the civil liability implications. And I knew that Don Cohn was the strongest 24 proponent of that. And I'm sure that he told me --25 Don never told me directly, I'm sure Joe told me at 05772 1 the time that Don felt very, very strongly 2 should not even take the next step. 3 Q That's my question. By the way, Don Cohn you 4 viewed to be a good lawyer, did you not? 5 A Absolutely. 6 Q You respected him, did you not? 7 A Yes. 8 Q You thought he was an honest lawyer? 9 A Yes. 10 Q You thought he worked very hard to give the 11 best legal advice he could to Liggett, is that fair to 12 say? 13 A Yes. 14 Q You are aware that Liggett had a 15 confidence in his judgment, is that fair to say? 16 A Yes. 17 Q Was Don Cohn known as someone who could do a 18 good job in considering all the facts and 19 circumstances and rendering his best legal judgment?

20 A Well, I mean, I didn't know him that well, 21 but, yes, he was a good lawyer. Joe liked him and 22 respected him and he had been around Liggett for 23 years. 24 Q And you never had any reason to believe that 25 Mr. Cohn ever acted illegally in connection with the 05773 1 advice he gave Liggett in connection with the XA 2 product, did you? 3 A I have no reason to believe that. 4 Q Let me show you a document that may establish 5 what date that you got the phone call. think you 6 have told us you don't know what time, what part of 7 1979 that occurred in, or do you know? 8 A No, I don't know. I don't know. 9 Q Let me try to shortcut this. I am going to 10 show you the following exhibit. I showed this to you 11 this morning. This is exhibit -- State Exhibit 6460, 12 which is the diary kept by Mr. Bowen Ross of the XA 13 project. 14 Do you remember I showed you this this 15 morning? 16 A Maybe yesterday. 17 Q Do you remember this morning -- I will just 18 show you -- we looked that the document. This is a 19 diary maintained --20 A I thought it was yesterday or this morning. 21 Q And Mr. Ferguson, I think I have the right 22 page stamp numbers now based on the exhibit I had. I 23 will be reading -- if I now have the right one -- from 24 JDR 57. Maybe I should look at yours. 25 I am going to show you a page in this 05774 1 document, and I represent this is Mr. Ross's diary 2 that he kept in his own handwriting. So we have to 3 struggle through his handwriting. 4 Do you recognize his handwriting just by 5 working with him over the years? 6 A I recognize it now because I

had seen the 7 document before. I wouldn't recognize the handwriting 8 if I had been given some blind test a couple of months 9 ago. I know that now to be his handwriting. 10 Q The page I have shown you is dated October 11 5th, 1979. Do you see that you mean in the corner? 12 A I do. 13 Q If we telescope in on this a little bit --14 you told us who you thought went to this meeting even 15 though you were not invited, do you recall that? 16 A Right. 17 Q Now, looking at the people, and I am trying 18 to read their names -- how do you pronounce this? 19 A Seidensticker. 20 Q Seidensticker, Greer, Hooker, Hogland? 21 A Present Todd Mulligan. 22 Q And Mulligan is the CEO? 23 A Yes. 24 Q I am going to go down to an entry down at the 25 bottom, and I will show you this entry down here. It 05775 1 says, Larry, go to Clanton, member of FTC, question 2 mark, Don says don't take risk? 3 A Right. 4 Q I believe you did mention Mr. Clanton's name 5 in your direct examination. Was he a commissioner or 6 connected to the FTC? 7 A Yes. And he is the fellow that I described 8 that I hired when I worked for Senator Griffin to come 9 to Washington. He then was on the senate commerce 10 committee. He then was the chairman. He had become a 11 commissioner at this time frame. If you had to pick 12 one person on the commission I was probably the 13 closest to, it would be Dave Clanton. And the thought was I would start this 15 process formally with someone that close to me. And 16 so that's why the focus on Clanton, and you know, Don

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17 says don't take risks. That's what
happened.
18 Q And when Mr. Cohn gave that
advice on that
19 date to his client, you have no
reason to believe that
20 he was doing anything illegal or
improper, do you?
21 A No, that was his view.
22 Q In fact, I think if we go
to the next page --
23 this actually says page 2. You can
see at the same
24 meeting, see at the top, page 2,
10/5/79.
25 A Yeah, sure.
05776
1 Q It says, Don says,
something, license
 2 available -- I don't know. Can you
read that?
 3 A I don't know what that word says.
It says
 4 something is available and see what
happens.
5 Q But the point I want to show you,
there is an
 6 arrow, and that is not my asterisk, someone
put that
 7 there. Larry can't go to member of FTC.
 8 A Right.
 9 Q And I show you that because -- and
apparently
10 that is consistent with your belief that it
might have
11 been Mr. Cohn who told Mr. Greer that he
did not think
12 you should go to the FTC?
13 A Well, I think it is probably
unfair to put
14 that on Don. That's what Bowen Ross's
notes say. I
15 don't think that Don was expressing a
view that was
16 unique to Don. I mean, I think there was
a real
17 political discussion. And others felt
18 shouldn't start this dialogue, others felt
that we
19 should.
20 Q But at least that memo says Don
is the one
21 that said it?
22 A There is no question that Bowen
Ross's notes
23 suggest that he took away from that
meeting that he
24 was at that Don was the most forceful
proponent of
25 that.
05777
 1 Q Now, what actually -- did you
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learn at that 2 time -- now, we are in the fall of 1979 based -- does 3 that by the way -- do you believe that is probably the 4 meeting? 5 A There is no question. Q And it is after that meeting Mr. Greer called 7 you? 8 A Oh, sometime. I mean, again, I am not clear 9 that we didn't have a go -- a go/no go decision a 10 couple of times during that year, because I really 11 recall it was schizophrenic, it was on one month, off 12 the next, and it was on the next month. But I think 13 more finality to the project, as far as I was 14 concerned, came after that meeting. 15 Q Okay. And what you found out, did you not, 16 at that time -- in that same time period, the fall of 17 1979, that your client Liggett had decided to pursue 18 an alternative marketing strategy and development 19 strategy for the XA cigarette, is that correct? 20 A That's correct. 21 Q Tell the jury what happened. What happened 22 was that Liggett started to explore the possibility of 23 finding a foreign tobacco company that would license 24 the XA technology from Liggett, and then that foreign 25 company would finish the development and then market 05778 1 the product in an overseas market; is that correct? 2 A Well, I wasn't involved in that effort. 3 directly, and so I can only tell you what 4 understanding was, that Seidensticker and Ross, Greer 5 was not involved directly, and I don't know that 6 anyone else was, possibly Hooker, met with three or 7 four foreign manufacturers or producers in an effort 8 to do exactly what you said, namely, license the XA 9 project and bring it initially to market and thus

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10 human testing in a foreign country.
11 Q In fact, did Mr. Greer tell you
in that same
12 meeting on October 5th, 1979, when Liggett
made the
13 decision to not have you go to the FTC, at
least right
14 then, that in that meeting these executives
made the
15 decision to go out and select foreign
16 companies to contact to have them work with
Liggett to
17 develop this product?
18 A Yes.
19 Q I will show you what has been
marked as State
20 Exhibit 6430. This is in evidence. And I
think --
21 what happened here, is that this meeting -
- this memo
22 is actually dated October 18th. But it is
actually
23 referencing the meeting we just talked
about that took
24 place, the project meeting on October 5th.
25
    Do you see that?
05779
1 A Um-hum.
 2 Q And this memo describes what
happened in that
 3 meeting. And, for example -- well, let's
go through
 4 it.
    Number one, these executives at
 5
Liggett
 6 decided to review with Englehart our
current agreement
7 due to expire on October 31, 1979 and
possible future
8 business relationships.
9
   Do you see that?
10 A Um-hum. Yes.
11 Q Number 2, and this is the one I
want to call
12 your attention to, select and proceed to
contact one
13 or more foreign tobacco companies and
monopoly
14 countries which may have an interest in
exploiting
15 this invention with a view towards
negotiation of a
16 license.
17
   Do you see that?
18 A Yes.
   Q And then they also were talking
19
about
20 contacting a United States tobacco company
which may
21 be interested in a purchase of the asset on
22 nonexclusive license.
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23
   Do you see that?
24 A Yes.
25 Q And number 4, they were going to
continue to
05780
1 proceed with a blind and unidentified
consumer taste
 2 test.
 3
   Do you see that?
 4 A Yes.
 5 Q So this idea of going to a foreign
country to
6 develop the XA cigarette, am I correct, the
7 strategy behind number 2 -- tell me if I am
correct.
 8 Liggett's strategy was it the XA product
could be --
9 did well in the marketplace in a foreign
country that
10 might make it easier for Liggett to
overcome the
11 hostile regulatory environment in the
United States
12 and thereby build up some momentum for the
13 that would make it easier to introduce it
into the
14 United States.
   Is that a fair statement?
16 A I wouldn't agree with that
exactly as you
17 have stated it. I believe -- my
observation would be
18 the reason why they decided to attempt to
select, and
19 they realized it would be very difficult,
because I
20 did have a number of discussions and I did
actually
21 bill some time on a couple of very
specific projects
22 with Bob Seidensticker relative to his
target -- his
23 target licensees.
24
    And that was all I did. But the
fact is,
25 their view was that they would be
avoiding the civil
05781
1 liability issues that were of primary
concern to Mr.
 2 Cohn by taking the product abroad in that
fashion.
 3 And at the same time achieving the human
testing that
 4 some, including me, thought would probably
 5 occur before we got the completely
favorable reaction
 6 from the trade commission to this
particular process.
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7 Q And did Mr. Ross or anyone ever

tell you that 8 the major reason why they wanted to go to a foreign 9 country was to build up momentum so they then could 10 introduce the product into the United States market? 11 A Well, even going back to some of the sort of 12 silly ideas we got from the public relations people, 13 that was an idea that had been invented long before 14 then. Mr. Ross never said that to me. I had very 16 limited, as I tried to explain, dealings with Mr. Ross 17 after this project, sort of went a different 18 direction. 19 Q Let me show you another document that is in 20 evidence that is is marked as Exhibit WX001017, which 21 is -- I will just hand it -- here. Let me hand you a 22 copy of it. This document is in 1981. It is actually 23 addressed to a gentleman in South Africa. 24 Do you see that, sir? 25 A I do. 05782 1 Q And just to show who the letter is from, it 2 is from Bowen Ross, is that correct? 3 A Yes. 4 Q And I want to call your attention to a 5 certain paragraph in this letter. By the way, were 6 you aware that not only did Liggett go to Europe to 7 try to get another tobacco company to license the XA 8 technology, that Liggett actually went to South Africa 9 to see if they could find a company there that would 10 help them license the product? 11 A Well, at one point one of the shareholders of 12 Liggett, whose name escapes me right now, was South 13 African. I think they might have gone to South Africa 14 very early in this effort. And indeed, one of the reasons that were 16 explained to me -- I can't recall this individual's 17 name, he was a man of some substance, and he was a

- 18 significant minority shareholder in Liggett -- one of 19 the reasons he was interested in Liggett was because 20 of this project, as I had been led to believe. So you have that right, they went 21 to South 22 Africa, but South Africa may have long predated their 23 interest in going to Germany or Switzerland or 24 wherever. 25 Q My point is, I am just looking at this 05783 1 letter. Mr. Ross states, and I will read the letter, 2 as I have previously mentioned to you, we 3 interested in cooperation with a company domiciled in 4 another industrialized country who has experience 5 either in tobacco or precious metals. Our intent will be to test market the project 7 XA cigarette in that or another selected country and 8 proceed as the marketplace dictates. And then the next sentence, our ultimate goal 10 is to introduce the cigarette in the United States 11 after a more receptive climate has been generated. 12 Do you see that, sir? 13 A I do. 14 Q Now, does that refresh your recollection that 15 what Liggett was trying to do was to find a foreign 16 market where this product could be sold in, and if the 17 product built up momentum, got some credibility, that 18 then they could then introduce it into the 19 marketplace and be able to deal with the -- maybe get 20 a more receptive climate? 21 A That's certainly -- I mean, my
- 23 Ross was always a great supporter of the project. And
  24 I believed he hoped that eventually that would happen.
  25 My involvement, in a very limited fashion, as

22 is that is certainly what Bowen Ross

recollection

hoped. Bowen

1 I said, with Seidensticker, was they were

attempting 2 to license it abroad, and the barriers to coming back 3 to the United States were still real, that that was 4 unlikely. I know that was Ross's hope. But based on 5 the decisions that were made in '79, it was unlikely 6 they were coming back to the United States. 7 Q At least Mr. Ross says in 1981, that is the 8 goal of Liggett here? 9 A Counsel, he also says in this letter here, he 10 gives them the abstract that we talked about out of 11 the 12th International Cancer Conference. It says the 12 bulk of the information of the information will be 13 given to you after our review without explanation. It 14 may be overwhelming and lead to confusion. This is 15 what we are talking about, this is confusion. 16 Q What's your point? I missed your point. 17 A My point is, Mr. Ross is still dealing with 18 the same materials in '81 that we dealt with in '78. 19 And he is still hopeful. I think that he may be 20 behind the curve. You asked me my recollection. I 21 think he is behind the curve at that 22 Q When you say he is behind the curve, if I 23 understood from you, you don't actually know what 24 happened to the XA project after you stopped working 25 on it? 05785 1 A I just know what I spoke with Mr. 2 Seidensticker about. 3 Q Also I showed you a document earlier that in 4 1984 Liggett was still trying to develop the product 5 by testing it with the nitrates. 6 A Right. And it would be sheer speculation for 7 me to suggest what I think that might be. I didn't 8 know about that and I don't know about it. 9 THE COURT: Let's go ahead and take the 10 recess.

(At this time a short break was 11 taken.) 12 (Jury not present.) 13 MR. McDERMOTT: May I proceed, your Honor? THE COURT: Yes. Who will be 14 arquing? MR. McDERMOTT: Bob McDermott. 15 16 We just wanted a clarification on the Court's 17 ruling with respect to the issue of preemption and 18 waiver. We understood the Court to issue a very 19 narrow ruling which would permit Mr. Ferguson on 20 redirect to raise questions with respect to this 21 witness's testimony or possible advice with respect to 22 advertisements for the Liggett palladium cigarette, 23 the XA project. In conversation with Mr. Ferguson he 24 seemed to think that the door was opened more widely, 25 and that other company's products, other times, other 05786 1 situations were also indicated in the waiver ruling. 2 We simply want a clarification if the Court 3 limited the ruling to, as I have it here, this product 4 and the scope of this witness's testimony. We think 5 that is the limit for permissible redirect. 6 THE COURT: Let me hear from Mr. Ferguson and 7 then you can respond. 8 MR. FERGUSON: I'm not sure what they mean. 9 Maybe this will clarify, but I don't intend to ask Mr. 10 Meyer whether in his opinion manufacturers of any 11 other product should have made any particular 12 advertisement one way or another. 13 MR. McDERMOTT: Or additional warnings or --14 MR. FERGUSON: I might want to ask him if 15 Marlboro was really higher in nitrous oxides, maybe it 16 should have made some disclosures, but I don't want to 17 ask him about advertisements or warnings. 18 MR. McDERMOTT: It seems to me, your Honor, 19 Mr. Meyer's testimony is given in connection with an

- 20 attempt to make what might be viewed as an implicit  $\ensuremath{\mathsf{I}}$
- 21 health or safety claim. And his advice was predicated
- 22 upon his understanding of the FTC substantiation
- 23 doctrine. It did not involve such things as normal
- 24 advertising requirements or the scope of pre-emption
- 25 or the impact of the warning label and the doctrine of 05787
- 1 pre-emption at all that dealt with the FTC doctrine of
- 2 substantiation when you were making a specific claim.
- 3 And so it seems to me that is what Mr. Webb was
- 4 exploring on cross-examination, his advice, given what
- 5 Liggett wanted to do with respect to the mouse skin
- $\ensuremath{\text{6}}$  painting claims and the implications of that, and
- 7 should be the limit of the redirect examination.
- 8 MR. FERGUSON: That is a pretty wide breadth
- 9 description of this advertisement.
- 10 MR. McDERMOTT: Again, your

Honor, it is in

- 11 the context of a specific product and a claim with
- 12 respect to a possible health claim, tumors on the
- 13 backs of mice. It is an explication of that
- 14 situation.
- 15 MR. FERGUSON: It is his motion.

I am a

- 16 little bit bewildered, your Honor, so I don't know how
- 17 to respond.
- 18 THE COURT: Well, my ruling was

what it was.

- 19 I think I stated it as carefully as I was able at the
- 20 time I gave the ruling. The plaintiff's redirect at
- 21 this time, absent further showing outside the presence
- 22 of the jury, will be related to the advertisement at
- 23 issue and other information which may include
- 24 advertising information related to smoking and health.
- 25 To that extent, I have found a waiver. I have not 05788
- 1 found a broader waiver which would permit an inquiry

2 through this witness, even if he were qualified on 3 this subject, as to what Marlboro could have disclosed 4 in its advertising or promotion. I regard this as a serious and difficult 6 question, waiver, and I believe that fairness requires 7 this kind of examination to respond to the examination 8 that has already been conducted by defendants. But I 9 would appreciate it if the parties would more fully 10 brief the waiver of pre-emption issue before we are 11 faced with another similar situation, if there is some 12 jurisdictional questions or questions of similarity to 13 other federal statutes, including the Federal 14 Insecticide, Fungicide and Rodentcide Act, 7 USC, 15 Section 136. There are questions regarding analogy to 16 ERISA. Whether that analogy is appropriate, whether 17 the analogy to the Labor/Management Relations Act is 18 appropriate, the extent of waivability, whether this 19 is a jurisdictional offense that cannot be waived. If I were absolutely forced to 20 make a 21 decision at this point on the broader question, I 22 suppose I would, but I am not comfortable doing so, 23 and I think this is the best line I can draw for this 24 witness. So I do encourage further briefing if we 25 continue in trial. 05789 1 Any lack of clarity there? 2 MR. FERGUSON: Yeah. I'm sorry, your Honor, 3 but it is a little unclear to me. If I can only ask 4 about this advertisement, then I guess I don't know 5 what has been waived. 6 THE COURT: Well, absent any finding of 7 waiver -- and perhaps I should even use that term in a 8 careful way to indicate that I'm not 9 necessarily in this ruling a waiver of the Protection

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10 Act. I am finding that the proper cross-
examination
11 may include an inquiry into what other
information
12 relevant to smoking and health could
have been
13 included in this Liggett advertising
of XA, and
14 arguably should have been included.
15 So to that extent you may inquire.
You may
16 not go on to other products or broader
inquiry.
17 MR. FERGUSON: Thank you. That
was helpful.
18 I understand. Mr. Luvera is saying that --
this is
19 Mr. Webb's discussion of it, Mr. Luvera?
20 MR. LUVERA: I don't know if the
Court wants
21 it or not. This is a page reference, your
Honor, to
22 where the discussion begins, the FTC
guidelines, leads
23 into this description of this particular
24 advertisement. Just the page number.
25 THE COURT: I reviewed the
transcript that
05790
 1 was related, including pages 5494, et seq.,
and I also
 2 looked back at the ruling and the
discussion that
 3 preceded the ruling at 5617.
 4 MR. LUVERA: Correct. Very good.
 5 THE COURT: Okay. We will get
started. I
 6 understand we may be able to press
through. I don't
7 know --
8 Where do you think you stand, Mr.
Ferguson,
9 with the time needed for your redirect?
10 MR. FERGUSON: I'm not going to
tell him.
11 THE COURT: You don't have to
tell him. You
12 tell me after they are done, though,
because I want --
13 I want to give you the time you need, if it
14 realistic that it will conclude, otherwise
I will
15 break at 4:00.
16 MR. FERGUSON: I have about an
hour, your
17 Honor, but I am considering ways to
collapse that to
18 much less, if possible. I would really
like to get
19 the witness off.
20 THE COURT: Just tell me when
cross is
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21 completely concluded whether you think
it is useful to
22 go on, because I would break at 4:00 if
I thought it
23 was hopeless.
24 MR. FERGUSON: Let me see where
they are, and
25 I can give you a yea or nay at that
point.
05791
1
    THE COURT: Fair enough.
 2
   (Jury present.)
   THE COURT: Please sit down.
 3
   BY MR. WEBB:
 5 Q Mr. Meyer, I want to pick up
where we left
 6 off. We were talking about this meeting
that took
7 place on October 5th where the decision
was made,
8 actually it is reflected at the bottom of
the memo,
9 that you would not go meet with the FTC.
10
   Do you see that?
11 A Yes.
12 Q The decisions that were made that
day by
13 these Liggett executives that -- the plan
that is set
14 forth in this memo -- do you have --
15 A Yes.
16 Q The various plans that were set
forth in this
17 memo, including to select and proceed to
contact one
18 or more foreign tobacco companies, which
might have an
19 interest in exploiting this invention with
a view
20 toward negotiation of a license. There
is nothing
21 irrational about the decisions made
that day by
22 Liggett from a business standpoint, are
there?
23 A I don't think so.
24 Q In fact, if Liggett at that time -
- if you
25 look at the issues that Liggett had to
address -- let
05792
1 me show you another document. I am going
to handed to
 2 you a document that is in evidence
AS001309. This is
 3 a document dated November 2nd, 1978, and it
says it is
 4 a review of the status of XA.
 5
   Do you see that?
 6 A Yes.
 7 Q I just want to show you a page --
I will turn
 8 to page 2. This status report sets forth
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some 9 potential problems that Liggett faced in developing 10 the XA product in the United States. 11 Do you see that, sir? 12 A Yes. 13 Q And let's go through this somewhat quickly. 14 My question, do you agree these were problems that 15 Liggett had to deal with, number 1, that 16 anti-smoking lobby will fight tooth and nail? 17 Do you agree with that? 18 A I'm not sure I agree with that. 19 Q You don't think there is an anti-smoking 20 lobby in the United States that challenges new 21 products that have been introduced into the 22 marketplace that are supposedly healthier or safer? 23 A That is not my problem. My problem is that 24 in my informal discussions, although I would have 25 anticipated, you know, that the American Cancer 05793 opposed to 2 anything like a better cigarette, that wasn't the be happy to 4 agree with the rest of these statements, but I don't 5 think I would agree with number 1, because my initial

- 1 Society and others would have been really
- 3 indication I had gotten. I mean, I would
- 6 and informal discussions suggested they had a more
  - 7 open mind than I thought.
- 8 Q The problems of this XA product that we have
- 9 been through in the last day or so, I am not going
- 10 back through them obviously, but you would agree there
- 11 were some significant problems with this product as
- 12 far as the technology of nitrates and palladium and
- 13 cobalt. Wouldn't those be pretty good targets for the
- 14 anti-smoking lobby to attack this cigarette?
- 15 A They would be good targets, but there were
- 16 also some significant potential benefits.
- 17 certainly back in '78 we thought it

balanced out on 18 the side of the plus. 19 Q What were the benefits beyond reducing tumors 20 on the backs of mice? 21 A We all thought that was a pretty significant 22 benefit. 23 Q Which could not be extrapolated to humans? 24 A Well, we certainly -- we weren't ready to 25 concede that the data could, but we had no evidence 05794 1 that that would not have been eventually extrapolated. 2 Q You mean people out there, consumers would 3 somehow think if it works with mice it is going to 4 work with us? 5 A No, if people started smoking the cigarette, 6 whether it be in a limited test or not, 7 epidemiology data that would come from that might very 8 well prove we had the breakthrough product that the 9 people at Liggett thought they did. Forget me. I am 10 only hearing what they are telling me. 11 Q Although if you wait for the epidemiology 12 data, you are going to wait for years before you get 13 that data? 14 A I think we talked about five years at the 15 minimum. 16 Q Five years before Liggett could even think 17 about introducing the product? 18 A Five years -- put it this way, if the 19 commission would have said go, it would have been five 20 years before you had the kind of data that really 21 established whether or not it was a safer cigarette. 22 Q Well, let's see how many of these others you 23 disagree with. Federal Trade Commission could classify it as 25 a health advertised product and enjoin us from 05795 1 advertising and marketing it. 2 A Absolutely. 3 Q You agree with that?

4 A Yes. 5 Q Number 3, since palladium is a metal, the 6 Food and Drug Administration could label it a foreign 7 substance and could seek to stop its marketing. 8 A I would put it a little different than that. 9 I would have called it perhaps a drug. In my memo I 10 think I reference that. But I agree with that. 11 Q Number 4, inhalation studies prove negative. 12 A That's possible, although everything we saw 13 to date suggests that wouldn't happen, but that is 14 possible. 15 Q Blood tests could prove negative. 16 A Same answer. 17 Q Marketing efforts could make us liable to 18 cancer litigation? 19 A I'm not sure I agree as strongly with some of 20 it. 21 Q I am going to read now number 7. Are you 22 with me? 23 Negative competitive reaction is possible, 24 resulting in downgrading of the product by 25 competitors. 05796 Do you see that? 1 2 A Yes. 3 Q Competitors, if they wanted to, have a right 4 to attack the product, if they think it is inadequate, 5 do they not? 6 A Sure do. 7 Q That's what competition is all about? 8 A Truthful downgrading of the product is 9 perfectly appropriate. 10 Q Well, we saw the Liggett document where 11 Liggett's own scientist thought that Philip Morris and 12 Reynolds would have a pretty good basis to attack the 13 product on the level of PAHs, anyway? 14 A If those guys were right, that would have 15 been a big problem. 16 Q Let's go on. Negative competitive reaction 17 also, B, putting pressure on government to enjoin its

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18 sale.
19 A Right, there is no question the
competitors
20 would have been urging the FTC to act to
stop us from
21 selling the product.
22 Q And next would be negative public
reaction --
23 by the way, I am going to go back. There
is nothing
24 improper about competitors downgrading the
product if
25 they honestly felt it should be downgraded,
is there?
05797
 1 A As long as it is truthful
disparagement,
 2 there is nothing wrong with it.
 3 Q And there is nothing wrong with
other
 4 companies going to the government and
complaining
 5 about the product if they honestly believe
there is
 6 something wrong with the product?
 7 A We don't want to discuss the
limits of Norr
 8 Pennington or Parker v. Brown, but in
antitrust law it
 9 is permissible to go and seek government
help to stop
10 a competitor from doing something which you
11 inappropriate.
12 Q Thank you. Number 8, negative
public
13 reaction to the idea of a foreign substance
in a
14 cigarette.
15 A Possible.
16 Q I mean, when people are told they
are smoking
17 cobalt and palladium, they might have a
negative
18 reaction?
19 A Possibly.
20 Q The public might not like the
taste,
21 packaging, name, promotion or
advertising?
22 A Sure.
23 Q Production costs might
require premium
24 pricing?
25 A Yes.
05798
 1 Q Number 11, Liggett Group
board might say no
 2 because of costs or risks involved?
 3 A Yes.
 4 Q And number 12, it might be
so successful
 5 regionally that we might not meet
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the demand. 6 A I remember that. 7 Q This document also goes on to talk about, 8 even in 1978 this plan to contact a foreign 9 government. I am -- are you with me, I am on page 7? 10 Are you with me? 11 A Not yet. 12 Q Are you with me? 13 A Okay. 14 Q Page 7. Other ways to market possible 15 contingency plans. 16 Do you see that? 17 A Um-hum. 18 Q Through overseas licensing arrangements with 19 foreign governments in countries where government has 20 cigarette monopoly, e.g., Japan, Italy, others. 21 Do you see that? 22 A Yes. 23 Q That is -- that is what actually eventually 24 happened when you get up into the 1979 and 1980 time 25 period, is that correct? 05799 1 A I believe so, but I'm not sure exactly 2 whether or not -- that's inclusive or not, but 3 certainly it is true in some respects. 4 Q I highlighted one the advantages that Liggett 5 set forth in this memo. Do you see number G -- letter 6 G? 7 A I do. 8 Q By the time a cigarette enters U.S. market 9 momentum has built up. 10 Do you see that? 11 A Yes. 12 Q Now, does that look to you like even back in 13 1978 Liggett understood there may be some business 14 benefit to getting this product introduced overseas, 15 build up momentum, and then come back and introduce it 16 into the United States? 17 A That's right. 18 Q Now -- and maybe I can try to shortcut this. 19 Tell me if I am correct. You are generally aware that 20 during the 1980 and 1981 time period

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Liggett did
21 contact a number of foreign governments --
I'm sorry,
22 foreign tobacco companies and attempt to
get those
23 companies interested in licensing the XA
technology,
24 is that correct?
25 A Yes. I will put it this way. I
understand
05800
 1 they contacted at least four.
 2 Q Okay. That's fine. And the net
result of
 3 that is that none of those companies that
were
 4 contacted in the foreign countries were
interested in
 5 entering into a license agreement with
Liggett, is
 6 that correct?
 7 A That's the right conclusion,
although it was
 8 my understanding, and it was from just
information I
 9 had at the time, that one of the companies
10 virtually agreed to an arrangement, but
then it
11 changed their minds. So, in other words,
there was
12 interest by one, there was not interest by
three. But
13 the one that had interest then changed its
mind.
14 Q Was the one that had interest in
West
15 Germany?
16 A I thought the one that had
interest was in
17 Switzerland.
18 Q That's final. Whether they had
interest or
19 not, they did eventually agree to enter
into a license
20 agreement with Liggett, is that correct?
21 A That's right.
22 Q Did anybody at Liggett tell you
that these
23 foreign companies were very
sophisticated and they
24 were asking some of the same questions
about nitrates
25 and palladium and cobalt that we have
been talking
05801
 1 about here today?
 2 A I really didn't have -- at the
time I
 3 certainly didn't have those kinds of
discussions.
 4 Q Okay. Well, let me show you a
document,
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5 then. 6 MR. FERGUSON: Foundation, your Honor. I 7 don't know if he is refreshing or what's happening. THE COURT: Let's hear if -- if the document 9 is in evidence and from a relevant period we will 10 allow it. 11 BY MR. WEBB: 12 Q I will show you a document that is in 13 evidence, it is marked as Defense Exhibit AS001296. 14 I will hand it to you and display the first page to 15 the jury. This document, at least if we look at the 17 top, it says, responses to question raised by Reemstma 18 representatives at the meeting in Hamburg -- Hamburg 19 is in West Germany, is that correct? 20 A I believe so. 21 Q -- on September 24th, 1980. Do you see that? 22 23 A Yes. 24 Q And that company that I may be 25 mispronouncing, we heard about it earlier in the case, 05802 1 that was a large tobacco company in Germany, is that 2 correct, or did you know that or hear of it? 3 A I thought -- my recollection was if they were 4 interested they were going to introduce this through 5 an affiliate in Switzerland. 6 Q Okay. I am asking you, is that what your 7 understanding was? 8 A That's my recollection. 9 Q Did you understand the company was actually a 10 company that was headquartered in West Germany? 11 A I believe so, at the time. 12 Q I am not going to spend a lot of time on 13 this, but let's just look at some of the questions 14 that were being asked by this foreign company. I am 15 looking at this question right here. 16 Question: The nitrate -nitrate nitrogen 17 content contributes to higher yield of NO 18 nitrosamines. Can we prove this is not a

problem? 19 Do you see that question being asked? 20 A Right. 21 Q That was the same kind of issue that we are 22 talking about here today? 23 A Right. And in fairness, the answers these 24 guys are proposing are the same answers they were 25 giving me. You see in the answers that materials 05803 1 should create no greater problem to smokers of our 2 products than to smokers of these current brands in 3 the market. They are saying the same thing to these 4 guys as they were saying to me. 5 Q "These guys" being the German tobacco 6 company? 7 A The folks from Reemstma. 8 Q This company asked Liggett, if the biological 9 relevance of these compounds is not detectable in 10 mouse skin painting experiments. Mouse skin doesn't 11 do anything to prove or disprove nitrosamines. Our 12 inhalation for rats is too short to prove anything. 13 Use hamsters, dogs or monkeys. Do you see those questions? 15 A I sure do. 16 Q Look at the question being asked on the next 17 page. Mouse skin painting doesn't do anything to 18 prove or disprove nitrosamines. 19 Do you see that, sir? 20 A I do. 21 Q Now, did you come to learn, in talking to 22 Liggett people, that these foreign companies were 23 saying they believed this product was not a safer 24 cigarette product and did not want to license it? 25 A No, I didn't come to learn that. 05804 1 Q What was the reason -- but wait, maybe --2 explain to the jury, what is a license agreement? 3 A A license agreement is simply an agreement to 4 take the technology under license, meaning

vou are 5 permitted to use patented technology with some sort of 6 royalty arrangement and use it in products that you 7 yourself manufacture. 8 Q And by the way, based on Liggett's financial 9 condition at that time, if they could find a partner, 10 if you will, in Europe that would finance completing 11 the development or marketing the product, would that 12 be a benefit to Liggett? 13 A It sure would have been. 14 Q Now, I showed you a document earlier, and I'm 15 not going to go back to it. At least it appears -- I 16 know you don't no anything -- let me show it to you 17 because I don't want to misstate what I am showing to 18 you. I showed you this earlier, and I'm not going to 19 go back through it again. This document that is in 20 evidence is AS1299. It is this document dated in 1984 showing 22 that Liggett is still testing prototypes of the 23 cigarette. Do you have it there, sir? 24 A I do. 25 Q And you told us that you don't know anything 05805 1 about this document? 2 A That's right. 3 Q And did not have any conversation with 4 Liggett about the document? 5 A That's right. 6 Q Now, that's 1984, though. Do you see that? 7 A I see that. 8 Q Now, you said you continued to represent 9 Liggett until, did you say late 1986 or early 1987, 10 approximately? 11 A Yes. 12 Q Then were you still representing Liggett in 13 1986 when a man named Bennett LeBow purchased the 14 Liggett Tobacco Company at a distress sale? 15 A No. 16 Q You were not? 17 A No, I was not. 18 Q Did you still have contact with

your friends 19 or acquaintances at Liggett after you stopped 20 representing them in 1986 or 1987? 21 A I had contact with two or three members of 22 the executive committee from time to time for a period 23 of two or three years after I stopped representing 24 them. But I had no contact with Bennett LeBow. 25 Q Mr. LeBow testified in this proceeding, in 05806 1 this case? A I only know that because I saw a clipping on 3 the wall of the room that the lawyers use. 4 Q I will show you page 2373 of the transcript. 5 And I would just call this to your attention regarding 6 this XA product. This is Mr. LeBow in this trial. 7 Question: And during your tenure of this 8 company, since 1986, isn't it true, sir, you never 9 told anyone at Liggett that they should try and invest 10 in any technology or manufacturing process to try and 11 develop a less hazardous cigarette, did you? 12 Answer by Mr. LeBow: As you showed, our 13 market shares were going down. We don't have the 14 money to invest in anything like. 15 And then the next question. Is the answer to 16 my question, during the time that you have been at the 17 helm, sir, you have never told anyone at Liggett to 18 invest in technology to try and develop a 19 hazardous cigarette? 20 Answer: Up until recently that was true. 21 Now, my question to you is, in conversations 22 that you had with acquaintances or professional 23 lawyers that you got to know at Liggett after Mr. 24 LeBow bought the company did anybody -- did anyone at 25 Liggett tell you that Mr. LeBow did not support the 05807 1 development of a safer cigarette, such as

the XA 2 cigarette? 3 A No. 4 Q Let me go to a completely different area. 5 Let me ask you one more question about foreign 6 countries, if I might. 7 Do you remember any discussions, Mr. Meyer, 8 that when Liggett was trying to go overseas 9 find a company that would agree to license the product 10 from Liggett, the XA technology, did anyone from 11 Liggett discuss with you a plan that they were 12 discussing that because B&W -- you know, B&W the 13 tobacco company in the United States, you are familiar 14 with that? 15 A Yes. 16 Q Because B&W had foreign connections with a 17 company called British American Tobacco, that that 18 might present a unique combination of offering Liggett 19 the opportunity to test the product abroad and then 20 extend it back into the United States? 21 A No. 22 Q Another subject matter. Mr. Ferguson asked 23 you questions about something that are called joint 24 defense agreements or joint defense arrangements. Do 25 you recall Mr. Ferguson's questions about that? 05808 1 A Yes. 2 Q Tell the jury, what are joint defense 3 agreements or join defense arrangements? 4 What are they, sir? 5 A As I think I tried to explain, they are when 6 several defendants get together and agree to share 7 documents and share information so that they can best 8 present a unified defense to a common complaint. 9 Q Joint defense agreements or joint defense 10 arrangements are quite common among companies who are 11 jointly named and sued in lawsuits, is that correct? 12 A Yes.

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13 Q Once a party brings a lawsuit
against a
14 number of different companies and sues
them jointly in
15 the same lawsuit, those companies do have
a common
16 interest in working together to defend
against the
17 lawsuit, is that fair to say?
18 A Yes.
19 Q And it is recognized, is it not,
sir, and you
20 are aware of this, that fairness dictates
that the
21 lawyers from those companies have the
right to enter
22 into these agreements so the lawyers can
work together
23 in addressing common issues?
24 A Yes.
25 Q And the underlying rationale for
those
05809
 1 agreements -- strike the question.
 2 You participated in themes
agreements, have
 3 you not?
 4 A Yes.
 5 Q As a lawyer?
 6 A Yes.
 7 Q The underlying rationale for
those joint
 8 defense arrangements is that each company
has its
 9 right to have the effective assistance of a
lawyer,
10 and in a joint defense situation the
lawyers often
11 cannot effectively represent their clients
unless they
12 have the opportunity to work together and
jointly
13 address common issues.
14
   Is that a fair statement?
15 A Yes.
16 Q These joint defense agreements are
perfectly
17 legal, is that correct?
18 A Yes.
19 Q There is nothing unethical about
such
20 agreements, is there?
21 A There is nothing unethical.
22 Q And in fact they are very very
common in
23 almost every circumstance where there is
significant
24 litigation or a regulatory proceeding, or
companies
25 have a common interest in the contested
matter, is
05810
 1 that fair to say?
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- 2 A Yes.
- 3 Q And let's take the tobacco

industry to be

- 4 specific. You are aware as an attorney for Liggett
- 5 that since the early 1950s companies in the tobacco
- 6 industry have constantly faced large numbers of
- 7 lawsuits and adversarial regulatory proceedings, is
  - 8 that fair to say?
  - 9 A Yes.
- 11 defense agreements between lawyers representing
- 12 tobacco companies so that they can communicate on
- 13 common issues with each other, is that correct?
- 14 A Yes.
- 15 Q And in fact you, as counsel

for Liggett,

16 based on certain matters you were

involved in on

- 17 behalf of Liggett, you participated in meetings with
- 18 other tobacco company lawyers under joint defense
- 19 agreements or arrangements, is that correct?
- 20 A Yes.
- 21 Q In fact, because of the

frequency of joint

- 22 litigation and adversarial regulatory proceedings
- 23 involving tobacco companies, the tobacco companies
- 24 actually had a committee of lawyers, that was
- $25\ \mbox{originally}$  called the ad hoc committee and later

05811

- 1 became known as the Committee of Counsel, is that
  - 2 correct?
  - 3 A Yes.
  - 4 Q And those groups of lawyers

from various

- 5 tobacco companies would meet together on a periodic
- 6 basis to discuss issues in which they had a common
- 7 interest because of pending litigation or these
  - 8 regulatory proceedings, is that correct?
  - 9 A Yes.
- 10 Q You actually attended some of

those meetings

- 11 of the Committee of Counsel so that you could
- 12 communicate with other tobacco company

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lawyers on
13 common issues, is that correct?
14 A It is.
15 Q And when you did that, you did not
believe
16 you did anything wrong, did you?
17 A I believed I did nothing wrong.
   Q That was a bad --
19 A I believed I did nothing wrong.
20 Q You believed you did nothing
wrong, you
21 believed you did nothing unethical?
22 A That's right.
23 Q Or nothing improper?
24 A That's right.
25 Q In fact, do you agree with me,
sir, that the
05812
1 tobacco industry may would be one of the
best examples
 2 you can think of where different companies
in the
 3 industry are so frequently being sued
together or
 4 involved in regulatory proceedings
that it is a
 5 classic example of the need for lawyers
from the
 6 companies to meet together to discuss
common issues?
 7 A Well, perhaps second to
politicians, I would
 8 agree with you.
 9 Q Okay. I will accept that.
   One last issue. You told us
10
earlier that
11 Liggett was issued the patent for this XA
technology
12 in 1977, is that correct?
13 A Yes. I guess that is the first
patent, I
14 will put it that way.
15 Q Right. That's is one I showed
you, 12977,
16 that's the one I showed you that was in
the book that
17 you were going to give to the FTC --
18 A Right.
19 Q -- that patented the actual
technology?
20 A Yes.
21 Q Now, so the jury understands,
once that
22 patent -- strike the question.
    Is it your understanding that up
to the time
24 that Liggett filed the patent, up to that
time Liggett
25 was holding this invention, if you will,
this
05813
 1 technology, very confidential within the
company?
```

- 2 A That's my understanding.
- 3 Q Because Liggett wanted to protect

its

- 4 property rights in developing that technology, is that
- 5 fair to say?
- 6 A That is my understanding.
- $7\,$  Q Once Liggett filed the patent in 1977, the
- 8 patent then becomes part of what we as lawyers call
- 9 the public domain, it is part of the public record and
- 10 people can have access to it, is that correct?
- 11 A Yes.
- 12 Q So once the patent was filed,

anyone that

- 13 wanted to understand the design and the technology of
- 14 the XA cigarette could do so by reading the patent
- 15 that I showed you here in the courtroom?
- 16 A Yes, that's right.
- 17 Q So from -- let me just ask, from 1977 up to
- 18 today, are you aware of anybody in government or in
- 19 any public health agency, or any scientist outside of
- 20 Liggett that has ever supported the concept that the
- 21 XA product was a safer cigarette that should have been
- 22 marketed and sold in the United States to smokers?
- 23 A Just so I am clear, are you including like a
- 24 Charlie Kensler, and A. D. Little on that?
- 25 Q No. Little was a contractor of

Liggett, is

05814

- 1 that correct?
- 2 A Just to be sure, because I view him outside
- 3 that scope. If you include the A. D. Little in that,
  - 4 not that I am aware of.
- 5 Q For example, you are not aware of anyone from
- 6 the National Cancer Institute that supported
- 7 that concept?
- 8 A Only informally and were encouraged by it
- 9 privately in meetings, that's all.
- 10 Q Did they ever say they were going to support
- 11 it to be introduced into the marketplace?
- 12 A I think I testified to that in my deposition.
- 13 The only thing I ever heard from anybody on the  $\,$
- 14 National Cancer side was that Kensler was

encouraged 15 by what Gori, Gio Gori had said to him, but no public 16 announcements. 17 Q And Liggett didn't finance the million 18 dollars for the testing? 19 A That's right. 20 Q Did anyone tell you from the Surgeon 21 General's Office of the United States --22 A I don't think so. 23 Q How about the Federal Trade Commission? 24 A No one said anything publicly. 25 Q The Food and Drug Administration? 05815 1 A I don't know, but I don't think SO. 2 Q Any other federal government health agency 3 that you know of ever stated they would support this 4 product being put into the marketplace? 5 A I don't believe so. 6 Q Did you ever hear of any state public health 7 agency of any of our fifty states ever say that they 8 would support this technology to be introduced as a 9 safer cigarette? 10 A No, I don't think so. 11 Q How about the American Heart Association? 12 A Same answer. 13 Q American Lung Association? 14 A Same answer. 15 Q American Medical Association? 16 A Same answer. 17 Q The American Cancer Society? 18 A Same answer. 19 Q Let's take it one step further, this patent, 20 once it went into the market -- or once the patent 21 issued in 1977, for seventeen years Liggett received 22 patent protection so that no one else could take their 23 idea, their technology and manufacture and sell a 24 product that used the XA design and technology, is 25 that correct? 05816 1 A Well, at least that long. I don't know 2 whether some of the related patents extended beyond 3 1994 or not, but certainly for that long. And the

4 answer is yes. 5 Q This one at least, '77 one would have expired 6 in '94? 7 A That's right. 8 Q So that means that at least for the last four 9 years, since 1994, if Liggett's patent of this XA 10 product -- if another tobacco company wanted to take 11 this technology and develop a safer cigarette and put 12 it in the marketplace, they could try to do so after 13 1994? 14 A I think that is arguably right. 15 Q And you actually told us at one point in time 16 -- let me make sure -- you were telling us that 17 Liggett was going to try to purchase 60 billion ounces 18 of palladium? 19 A If I said that, I misspoke. I think my 20 recollection was that there were -that there was 21 enough palladium in the world without adversely 22 affecting price to supply 60 billion ounces or 23 something like that. 24 Q Okay. But did you tell us that then Liggett 25 was going to purchase 60 billion ounces -- produce 60 05817 1 billion cigarettes and then capture sixty percent of 2 the cigarette market? 3 A No, I said -- the questions I thought were 4 what the maximum potential market share of Liggett 5 might be were they able to sell that much product. 6 And it was 60 billion ounces, as I recall, translated 7 to 60 percent of the market in cigarettes. 8 Q But you are not suggesting that you thought 9 Liggett could capture sixty percent of the cigarette 10 market with the product we have been talking about for 11 the last two days? 12 A I am certainly not suggesting that. 13 Q Even if it had any value -- if this product 14 had commercial value, do you think that in the last

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15 four years that another cigarette company
might have
16 tried to pick up the technology and
introduce the
17 product?
18 A Possibly.
19 Q In fact, let me show you a
document. I will
20 end with my company that is in evidence --
not my
21 company, but the company I represent,
Philip Morris.
22 This is in evidence as DA241. The jury has
seen this
23 before. This is a document dated November
28, 1978.
24 It is an internal office correspondence at
Philip
25 Morris Company between a Mr. Resnik and Mr.
Goldsmith.
05818
 1 Do you see that, sir?
 2 A I do.
 3 Q Did you know either one of those
two
 4 gentlemen?
 5 A I recognize Goldsmith's name, but
I don't
 6 remember what position he had. I don't
know Mr.
 7 Resnik.
8 Q That's fine. It says the subject
-- L&M,
9 that is Liggett & Myers, is that correct?
10 A Right.
11 Q Patent on palladium, and they cite
the patent
12 number?
13 A Yes.
14 Q Is that correct?
15 A Yes.
16 Q And let's see what Philip Morris
thought
17 about this patent. The L&M patent on the
addition of
18 palladium to tobacco incorporated in
cigarettes is of
19 no practical value for the following
reasons.
20
   Do you see that, sir?
21 A I see.
22 Q That number one, palladium alone
is not
23 effective. The cigarette smoke condensate
produced by
24 the addition of palladium alone to the
tobacco was not
25 different from a control cigarette on mouse
skin
05819
 1 painting tests.
 2 Do you see that?
 3 A Um-hum.
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- 4 Q And that is true, is it not?
- 5 A I think -- palladium alone would not be
- 6 effective, I think that's right.
- 7 Q Next, Philip Morris says,

palladium plus

- $\ensuremath{\mathtt{8}}$  sodium nitrate is no more effective than sodium
- 9 nitrate alone. The cigarette containing palladium
- 10 plus three percent sodium nitrate showed an 89 percent
- 11 reduction in tumor incidence on mouse skin painting
- 12 tests. However, the addition of only sodium nitrate
- 13 by other experimenters have shown similar results,
- 14 Hoffmann and Wynder, 8.3 percent sodium nitrate, 84
- 15 percent reduction in tumor incidence, and Dontenwill,
- 16 7.78 percent sodium nitrate, 66 percent reduction in
- 17 tumor incidence.
- 18 Do you see that?
- 19 A Yes.
- 20  $\,$  Q At least Philip Morris believed what Liggett
- 21 was doing was not unique at all, and that Wynder and
- 22 Hoffmann and Dontenwill showed nitrates will cause
- 23 these types of tumor reductions?
- 24 A Obviously, I am not the
- scientist or patent 25 lawyer. I thought the patent technology
- -- I thought

05820

- 1 it was magnesium nitrate. I am not sure
- $2\ \mbox{real difference.}$  But I only know what I was told at
- 3 the time, and that was the palladium salts plus the
- $4\ \mbox{magnesium}$  nitrate salts resulted in this unique
- 5 reduction. And therefore when you use sodium nitrate
- 7 seen this before.
- 8 And I would accept the fact that
  sodium
- 9 nitrate alone may very well have been biologically
- 10 important.
- 11 Q Well, let's look at the last paragraph.
- 12 Philip Morris said about this patent, the addition of
- 13 sodium nitrate adds oxides of nitrogen to the smoke.

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14 That's the issue you and I have been
talking about?
15 A Right.
16 Q This is the nitrosamines issue,
isn't it?
17 A Yes, it is.
18 Q The addition of these quantities
of sodium
19 nitrate to cigarette tobacco produces
large amounts of
20 oxides of nitrogen in the smoke which is
completely
21 objectionable from the standpoint of
animal inhalation
22 experiments.
23
   Do you see that, sir?
24 A I do.
25 Q Do you think there is anything
irrational
05821
1 about another cigarette company looking
 2 technology and concluding essentially
that it was
 3 stupid?
 4 A Based on that memo, I would say
that that
 5 wouldn't be irrational.
   MR. WEBB: I have no more
questions.
 7 MR. McCORMICK: I have no
questions of this
 8 witness, your Honor.
 9 MR. SCHIFFERMAN: No questions,
your Honor.
10 MR. KACZYNSKI: No questions,
your Honor.
11
           REDIRECT EXAMINATION
12 BY MR. FERGUSON:
13 Q Mr. Meyer, I'm back. It has
been a while.
   Mr. Webb was just asking you a
few minutes
15 ago about joint defense arrangements. Do
you recall
16 that?
17 A Yes.
18 Q And you testified that there
wasn't anything
19 improper or unethical about firms engaging
in joint
20 defense arrangements, correct?
21 A Yes.
22 Q You also agreed with him that the
tobacco
23 industry, I think you said, except for
politicians, is
24 probably the classic case where these
25 arrangements are necessary because they
are sued so
05822
 1 often on similar grounds?
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2 A Yes. 3 Q Was it important therefore that Liggett be 4 permitted to continue to participate in the industry 5 joint defense agreements? 6 A As I testified before, it was absolutely 7 essential. 8 Q And was it essential in your opinion to 9 Liggett's very survival as a business that it be 10 allowed to continue --MR. WEBB: My objection -leading. 12 THE COURT: Sustained. 13 BY MR. FERGUSON: 14 Q How important was Liggett's participation to 15 the joint defense agreements? 16 A I wrote a memorandum. In my judgment it was 17 absolutely essential. 18 Q Did Mr. Greer report to you -- I think you 19 said in your direct examination that Liggett had been 20 threatened with expulsion from the joint defense 21 agreement? 22 MR. WEBB: Object. Leading. 23 THE COURT: Sustained. 24 BY MR. FERGUSON: 25 Q What did Mr. Greer tell that you Ernie 05823 1 Pepples had told him about the XA cigarette? 2 A Well, Mr. Greer told me on more than one 3 occasion, as I tried to explain, that Liggett would be 4 -- that the project was stupid, idiotic, that Liggett 5 would be excluded from any joint industrial defense 6 activities, that it was a ridiculous admission against 7 interest, that it was ruinous, it would be ruinous for 8 the industry, it would be ruinous for Liggett. 9 Q Did Mr. Greer report -- strike that. I want to talk a little bit about the bad 11 guys that Mr. Webb was talking to you about. 12 A The politicians? 13 Q No, the other bad guys. The ones that appear 14 on these reports. He asked you whether it

was true 15 that the XA did not address heart disease, do you 16 recall that? 17 A Yes. 18 Q And he also asked you whether it was true 19 that the XA did not address chronic obstructive 20 pulmonary disease, COPD, do you remember that? 21 A And I think I answered that the best I could, 22 not directly for sure, yes. 23 Q And he asked you if you agreed that many 24 health authorities believe that cigarettes play a role 25 in both cardiovascular disease and chronic obstructive 05824 1 pulmonary disease, and you agreed with that. Do you recall that? 2. 3 A Yes. 4 Q I think he also asked you if you agreed that 5 health authorities believe that cigarettes play a 6 causative role in lung cancer, and you agreed to that. Is that also correct? 7 8 A Yes. 9 Q Did the researchers believe that mouse skin 10 was -- had similar sensitivity to human lung tissue? 11 A Yes. 12 Q Was that one of the reasons that mouse skin 13 painting was accepted as a substitute to try and 14 determine carcinogenicity and tumorigenicity of smoke 15 condensate? 16 A Accepted by the authorities -accepted in 17 part by the authorities. Certainly accepted by those 18 who advocated such testing, such as Wynder, et al. 19 Q Did the testing significantly reduce tumors 20 and carcinogenicity in the mouse skin painting tests? 21 A Yes. 22 Q This is Exhibit 6461, page LGM00044. And I 23 recognize that this is a little indistinct. Can you 24 see that at all? You have it in front of you? 25 A I have it.

## 05825 1 Q It says here 19Z control. Let me do --2 percent of animals with papillomas -that's a tumor? 3 A Yes. 4 Q And carcinoma is a cancerous tumor? 5 A That's my understanding. 6 Q And down, the horizontal axis is weeks on 7 test? 8 A Yes. Q And this one that starts just over 9 twenty 10 weeks and goes up to about forty percent of the 11 animals having carcinoma or papilloma, it says 19Z 12 control, is that a cigarette without the catalyst? 13 A Yes. Without the catalyst. 14 Q And then the one that is right beneath it 15 there is 20Z, which gets up to about thirty-five 16 percent. It says catalyst, alone, that's the one that 17 didn't have the magnesium nitrate in it? 18 A That's my understanding. 19 Q And then this one at the bottom that shows 20 basically no tumors or cancer until after sixty weeks 21 of the test, and then it looks like about two or three 22 percent, 21Z catalyst and nitrate. The one I 23 highlighted there, is that basically the prototype 24 that led to the XA cigarette? 25 A That is my understanding. 05826 1 Q By the way, I was meaning to ask you, do you 2 know where the name Epic came from? How was that 3 chosen? 4 A The answer is I know where it came from. 5 Q Were you part of the decision to make the 6 name Epic in this thing? 7 A I was in a few meetings where they discussed 8 why to use Epic. 9 Q Why was it decided to use Epic as the name? 10 A Well, because of what I have tried to say, 11 based on what the folks at Liggett who were talking to 12 me at least felt, that this was a

development of very 13 significant, historical proportions. And if you check 14 the dictionary definition of Epic, it means 15 means a lot of things. It can be a play, it can be a 16 theatrical production, but I believe it also means a 17 historical event of seminal importance. That's how 18 they viewed this. The folks that were promoting this within the 20 company and the folks who I dealt with thought that it 21 was an event of epic proportion. 22 Q The Epic or XA cigarette, did that also have 23 any measured effect to cilia toxicity and 24 cytotoxicity, do you know what I mean by those words? 25 A Yes. I think Mr. Webb, Counsel, brought me 05827 1 through some of these charts. When you look at these 2 charts I think I made reference to the fact that there 3 were some ostensible benefits in other areas besides 4 the incidence of tumors. And that would have been 5 one. 6 Q Okay. Cytotoxicity, cyto is a cell, right? 7 It is 94 in Exhibit 6461. 8 A I see it. 9 Q Cytotoxicity. And this one is cilia 10 toxicity. You understand that cilia are the little 11 hair-like structures that are on the cell structures 12 of the lung? 13 A That's what I am told. 14 Q I just told you that, didn't I? So cilia 15 toxicity would mean to you poison or toxic effect on 16 the little hairs in the lung, correct? 17 A Yes. 18 Q And the XA on this chart is the one in the 19 middle, right? 20 A That's right, the three bars in the middle, 21 out of all of these charts are always the XA. 22 Q And this says top ten brands 1977 up here. 23 And it shows in cilia toxicity that the top ten brands

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24 are two to two and a half times as high in
cilia
25 toxicity as the XA, correct?
05828
1 A Yes.
 2 Q And then the low-tar brands, in
one case
 3 almost the same, in the other cases close
to the XA?
 4 A I would say that differently.
Anyone can
 5 read these charts. To me the charts on
cilia toxicity
 6 -- the reason why there is not ten bars
there, as I
 7 understood, they did not do complete
testing. You
 8 will see on some of these others they have
many more
9 brands evidenced by the bars.
10 But here, for example, on cilia
toxicity, as
11 I recall the stuff, there were only four
top ten
12 brands tested, and there were only three
13 brands tested. And if you take the
numbers across,
14 there was one low-tar brand that was
close to the XA
15 project. All the others were
significantly higher.
16 And the four leading brands that were
tested were
17 significantly higher on this one
particular
18 measurement.
19 Q All right. Would this suggest to
you whether
20 the XA had potential health benefits in
addition to
21 the reduced tumorigenicity in the mouse
skin painting?
   MR. WEBB: Objection. Lack of
foundation.
23 THE COURT: Sustained.
   BY MR. FERGUSON:
25 Q This was part of your FTC book,
wasn't it?
05829
 1 A Yes.
 2 Q And you reviewed it at the time?
 3 A Yes.
 4 Q Did you discuss the issues of
cilia toxicity
 5 and cytotoxicity with the scientists at
Liggett?
 6 A To a lesser extent, but to the
same degree I
 7 discussed things like nitric oxide that we
went
 8 through before.
 9 Q This is page 9 of the same
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exhibit. I think 10 we were on it before? 11 A Is there an LGM number on that? 12 Q Yeah, LGM00009. 13 A I'm sorry. 14 0 9? 15 A 9. 16 Q I'm trying not to be as fast a talker as Mr. 17 Webb and some of my other brethren? 18 A You can speak as fast as you can. 19 Q Found it? 20 A Got it. 21 Q This indicates that other gasses that have 22 been singled as undesirable by health authorities have 23 also been reduced as compared to conventional filter 24 brands. Do you recall this being in your 2.5 materials in 05830 1 1978? A This definitely was and the charts we looked 3 at were. And in fairness, I would say the same thing 4 I said to Mr. Webb. Some of them showed a potential 5 health benefit, and some of them showed something like 6 in the nitric oxide that we expected to have some 7 questions about. But there were more benefits than 8 simply the reduction of the tumors and the cancerous 9 tumors on the skins of mice as I recall at that time. Q Do you have a general understanding of what 11 it is in cigarettes that is generally credited or 12 rather accused, I guess, of being the cause of heart 13 disease that is related to cigarettes? 14 MR. WEBB: Objection. Lack of foundation. 15 THE COURT: Sustained. 16 MR. FERGUSON: I thought I asked if he had 17 any information about that. So I will rephrase the 18 question. 19 THE COURT: Yes or no. You can go ahead and 20 answer yes or no. 21 THE WITNESS: I mean, only as a layman would. 22 The answer would be yes, as a layman I thought I 23 understood it would be the nicotine. That

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would be my
24 layman's answer.
25 THE COURT: That sounded like more
than yes
05831
 1 or no.
   THE WITNESS: I don't know if the
answer is
 3 correct, your Honor.
 4
    THE COURT: Go ahead.
   BY MR. FERGUSON:
 6 Q Would you turn to page 0342 in
your FTC book
          I apologize to the jury that that
 7 there.
can't be
 8 very well seen. I just want you to see the
cover page
9 right now.
   Do you recognize that, Mr. Meyer,
10
as
11 something called the Hunter report?
12 A Yes.
13 Q And that was included in your FTC
book,
14 correct?
15 A Yes.
16 Q And this article includes -- this
is what
17 happens when you bring them all the way
from England,
18 they get blurry.
   MR. WEBB: What page are you on
19
now?
   MR. FERGUSON: 347.
20
21 THE WITNESS: I think Mr. Webb was
better at
22 that than you are.
   BY MR. FERGUSON:
23
24 Q I don't think we have time to have
him fix
25 it. This is entitled Compounds in
Cigarette Smoke
05832
 1 Judged as Possible Contributors to the
Health Hazards
 2 of Smoking. And Dr. Hunter, who did this
report, as I
 3 understand, was the chair of the smoking
and health
 4 committee in Great Britain, is that right?
 5 A Yes.
 6 Q And this committee lists as
probable
 7 contributors to the health hazards of
smoking,
 8 acrolein, correct?
 9 A Yes.
10 Q Cresol, whatever that is,
hydrocyanic acid?
11 A Yes.
12 Q Nitric oxide, nitrogen dioxide,
13 These are all things you identified with
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Mr. Webb?
14 A Right.
15 Q Next page, suspected
contributors to the
16 health hazards of smoking includes
acetaldehyde,
17 acetone, acetonitrile, something that is
even worse,
18 ammonia, benzene, carbon dioxide, DDT,
furfural,
19 hydrogen sulfide, on and on, correct?
20 A Right.
21 Q Did Liggett, in its development
work on the
22 XA and the information that is included
in your FTC
23 briefing book, examine some of those
various compounds
24 that we just saw were identified as some of
25 contributors of health problems with
smoking?
05833
 1 A Yes.
 2 Q And they checked to see how many
of those
 3 were in the XA?
 4 A Not all of them, but certainly
some of them.
 5 And I -- well, there is no question. Yes.
 6 Q And did they compare some of those
compounds
7 with other cigarettes?
 8 A Yes.
9 Q Conventional marketed cigarettes?
10 A Yes.
11 Q Generally, what is your
recollection of how
12 the XA stacked up against the popular
cigarettes of
13 the day with regard to those substances it
is believed
14 to contribute to disease?
15 A Well, again, we would sort of have
to go back
16 through the charts. As I tried to tell Mr.
Webb, it
17 was my recollection, just like in the
answer that they
18 had devised for some of the questions that
19 their efforts to license the product
abroad, that they
20 had achieved about the same level of nitric
oxide or
21 nitrates as a Marlboro, maybe a little
better, but
22 that in some of these other
categories, I think I
23 specifically mentioned hydrogen
sulfide, they had
24 actually achieved a significant
reduction. And that's
```

25 really all that I remember. 05834 1 But if you look at the charts you will see 2 that on some of these other elements, if you will, 3 constituents of cigarette smoke, they had potential 4 benefits. I mean, we didn't know whether they were 5 benefits or not, but they had potential benefits 6 listed. In fairness to me, you pointed out something 7 I did not see when I thumbed this myself. We do have 8 Dr. Hunter's report in there, which was going to be a 9 part of the commission briefing booklet which would 10 have said that nitric oxide and nitrogen dioxide were 11 bad guys, in your words. 12 Q Let's look at some of the charts that I think 13 you are referring to. This is Exhibit 6364. And I 14 will start with page LG0132558. 15 A Have you given that to me? 16 Q I thought I did. If I haven't, I will give 17 you one. 18 Does that help? 19 A What page are you on? 20 Q I am on -- the last three digits are 558 of 21 the --22 MR. PHILLIPS: Are you on the same exhibit? 23 MR. FERGUSON: Yeah. No, I'm sorry, 6364. 24 This is a bar graph comparison. We better put up the 25 title page of this. 05835 1 BY MR. FERGUSON: 2 Q Liggett & Myers Tobacco Company memorandum to 3 J. D. Ross from J. D. Mold, status report, project 4 tape. 1/6/77. Have you seen this before? 6 A I'm sure that I saw it at some point. I see 7 that it has the cigarettes identified, so I know that 8 I saw this or a document like it at some point. 9 Q Let's go back to page 558, the one I had up 10 there. 11 A I've got it. 12 Q And the top table says tar. Are

you aware 13 that at some point tar was generically identified as 14 the source of the bad guys in tobacco? 15 A Am I aware of that? 16 Q Yes. 17 A Yes. 18 Q It shows here milligrams per cigarette of 19 tar. And is this little shaded one over here that has 20 the A, is that the XA? 21 A Yes. 22 Q And it looks like two commercial brands, Pall 23 Mall EM, and True have less tar. And then this is Mr. 24 Webb's client's cigarette up here, Marlboro? 25 A That's a Philip Morris product, yes. 05836 1 Q And that looks like it is at about 18 2 milligrams tar compared to XAs 7 and a half, roughly, 3 correct? 4 A That's what the chart says. 5 Q Nicotine. Again, the shaded column A is the 6 XA? 7 A Yes. 8 Q Tareyton, is that an American Tobacco brand? 9 A Yes. 10 Q Winston is R.J. Reynolds? 11 A Yes. 12 Q Marlboro is Philip Morris? 13 A Yes. 14 Q Viceroy is Lorillard? 15 A Yes. 16 Q So within those two parameters, am I correct 17 that the XA ranks lowerer than most of the popular 18 commercial brands? 19 A Right. You could have drawn the 20 conclusions without identifying the brands from these 21 charts that were in the reports and the briefing 22 booklet. 23 Q Turn to the next page, please. Which is 559, Counsel. The upper graph here is CO. Mr. 25 Meyer, is 05837 1 that carbon monoxide? 2 A Yes. 3 Q One of the bad guys, right? 4 A That's my understanding. 5 Q And, again, here we have got True

cigarettes 6 over on the end, next to that at a slightly higher 7 level is the XA, and, again, the popular brands, 8 Winston, Tareyton, Kent, Viceroy, Marlboro, were all 9 significantly higher than the XA in carbon monoxide? 10 A That's what it says. 11 Q Beneath that is NO, this is nitric oxide? 12 A That's right. 13 Q Is nitric oxide one of those substances that 14 is produced by adding nitrates that Mr. Webb was 15 referring to? 16 A It can be. 17 Q And this shows -- I have a few more here that 18 have lower levels of nitric oxide, Multifilter, which 19 is Philip Morris, True, Doral, Kent Golden Light, Pall 20 Mall Extra Mild and True. However, having 21 nitrous oxide, leading the pack, is Marlboro, correct? 22 A Yes. 23 Q Acrolein, whatever it is, and hydrogen 24 cyanide, those are two of the bad guys? 25 A Yes. 05838 1 Q And these show for acrolein --2 How do you pronounce that, Mr. Webb? 3 MR. WEBB: I'm not sure. 4 BY MR. FERGUSON: 5 Q It shows XA as the lowest, right? 6 A That's what it shows. 7 Q And the four biggest for acrolein are Kent, 8 Winston, Viceroy, Vantage, and number 5 is Marlboro, 9 correct? 10 A Yes. 11 Q Is HCN hydrogen cyanide? 12 A Yes. 13 Q Is that one of the bad guys? 14 A Very bad. 15 Q Down at the bottom we have True, and leading 16 the pack Marlboro, three times as much hydrogen 17 cyanide, with three times as much as XA? 18 A Correct. 19 Q Phenols, pretty much the same kind of 20 picture, correct? 21 A Yes. 22 Q Page 562, denominated NNN, and I

used to know 23 how to pronounce that. Can you pronounce it? Is that 24 a nitrosamine? 25 A I'm not positive. I am just checking this 05839 1 other document to see whether it is identified 2 somewhat more specifically. 3 JUROR: Counsel, can you get the corner down 4 so I can see it? I would appreciate it. MR. FERGUSON: There you go. BY MR. FERGUSON: 7 Q Did you find that? 8 A Yes. 9 Q Whatever it is, XA is quite a bit lower than 10 the others? 11 A Right. 12 Q I think you mentioned something in your 13 cross-examination to one of Mr. Webb's questions. I 14 don't know how I stay in one spot and always lose that 15 pad of paper. You took some pleasure in the fact that the 17 XA tested lower in some parameters than the Marlboro, 18 have I got that right? 19 A I don't know -- it has been a long day. I 20 feel sorry for the jury. 21 I don't know that I took some pleasure. I 22 think everyone was somewhat relieved when they saw 23 that the nitrates or the nitric oxide were at levels 24 below the Marlboro, because the Marlboro was, after 25 all, the number 1 selling cigarette at the time. 05840 1 think it still is. 2 Q Mr. Luvera tells me if I go all the way down 3 here I can focus it. I assume he has better eyes than 4 I do. 5 This is again from your FTC briefing book, 6 Exhibit 6461. And this is page LGM337. It reads, constituent levels milligram per 8 cigarette in smoke of reference cigarettes, inhalation 9 control cigarette and prototype cigarettes. 10 Now, the prototype cigarettes are the XAs, is

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11 that correct?
12 A Yes.
13 Q And it appears -- do I have this
right, the
14 control cigarette is a Marlboro?
15 A That's what it says. 85
millimeters.
16 Q Let's go through this. The first
item here
17 is tar, total particulate matter, correct,
18 Marlboro having 20 milligrams, correct?
19 A Right.
20 Q And the XAs, the lowest being 7
milligrams,
21 up to 13 milligrams?
22 A Correct.
23 Q I want to focus here on a couple
of bad guys
24 that you identified.
25
     Carbon monoxide. Marlboro has
16.4
05841
 1 milligrams per cigarette of carbon
monoxide.
   Have I read that correctly?
 3 A Yes.
 4 Q And the XA has 5.4 for the one
prototype, to
 5 a high of 11.6, correct?
 6 A Yes.
 7 Q Nitric oxide, Marlboro is .33
milligrams per
8 cigarette, XA .34 for two of them, and .4
for one,
9 correct?
10 A That's correct.
11 Q Phenols, another bad guy -- .061
for
12 Marlboro, .021 to .016 for XA.
13 Hydrogen cyanide, .34 for
Marlboro, less
14 than .1 for all the XAs, correct?
15 A Yes. On the phenols, I think you
made a
16 mistake on phenols. I think it is 3.6 and
3.6. And I
17 certainly don't want to correct any more
mistakes to
18 keep you going.
19 Q No, I won't do that. I won't go
through the
20 rest of the chart.
    The point I wanted to ask you
about is that,
22 am I correct, in virtually every parameter
of the bad
23 guys that was tested by Liggett that, as
contrasted by
24 the Marlboro, the XA was lower in each of
25 constituents or the same as the Marlboro?
05842
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A Well, what you read me or the ones we looked 2 at, remember, it is just the smallest little tick 3 higher on nitric oxide. And that's what we tried to 4 say, that -- the nitrate being what it was, the nitric 5 oxide piece was sort of at the level of Marlboro. It 6 wouldn't be fair to say it was lower, it wasn't. It 7 was just a tick higher. 8 MR. FERGUSON: About a half hour. THE COURT: Well --10 MR. FERGUSON: And I anticipate there may be 11 some over there. 12 THE COURT: That's right on the cusp 13 actually. I would like to accommodate Mr. Meyer if I 14 could. Can you finish by 4:30 at the latest? Will 15 you commit -- will you commit to that? 16 MR. FERGUSON: If Mr. Luvera promises he will 17 come and tap me at 4:25, I will commit to that. 18 THE COURT: I will do better. will tell 19 you when it is 4:25. Is there anyone who 20 unbreakable commitment that is coming up? I would 21 like to accommodate the witness, who is otherwise 22 going to have to return next week from the east coast. 23 If we run for another perhaps forty minutes, we will 24 be done. 25 Any calls that you would like the bailiff to 05843 1 make? 2 Okay. We will continue. 3 Go ahead when you are ready, Mr. Ferguson. 4 BY MR. FERGUSON: 5 Q Do you remember this chart that Mr. Webb had 6 here, Mr. Meyer? 7 A I do. 8 Q The to be proven chart? 9 A Yes. 10 Q My recollection is he asked you -- he said I 11 want to ask you if you have any evidence to offer with 12 regard to these. Is that your recollection? 13 A Yes.

14 Q So would it be more accurate to say I will 15 testify about rather than to be proven? 16 A I didn't have any problem with the way he put 17 it, but it would be okay to say that, too. 18 Q Do you know whether XA is a safer cigarette 19 that would cause less disease in smokers? You don't 20 know, do you? 21 A Am I testifying about that? 22 Q Yes, sir. 23 A No. 24 Q You don't know? 25 A No, I'm not testifying about that. 05844 1 Q Not testifying. 2 Are you testifying in the area that the XA 3 would be advertised so that smokers would understand 4 the benefits? 5 A Well, I think he is right in saying no there. 6 It was not going to be advertised in a way that there 7 would be any benefit claims at all. any benefits 8 were stated, they certainly would be offset with the 9 negative information. So that is sort of in the 10 middle there. 11 Q We will leave the no there. 12 3, Medicaid smokers would choose XA instead 13 of other cigarettes. 14 Are you testifying about that? 15 A I am not testifying about that. 16 Q Not testifying. 17 4, Medicaid smokers would have less smoker 18 related disease with XA. Are you testifying about 19 that? 20 A I am not testifying about that. 21 Q Finally, 5, the State of Washington would 22 have less Medicaid health care costs because of XA. 23 Are you testifying about that? 24 A I am not testifying about that. JUROR: Is this a chart that has been entered 05845 1 into evidence? 2 MR. FERGUSON: No, it hasn't. 3 BY MR. FERGUSON: 4 Q We are back to stickman here, we will call

5 this. 6 Smoke Epic. This is the mock advertisement 7 that Mr. Webb put up for you involving the Epic 8 cigarette. Do you recall that? 9 A Very well. 10 Q And on the second page here, warning, 11 increased nitrogen oxides in Epic may be dangerous to 12 your health. 13 Have I got that right? 14 A Yes. Q Based on what I just showed you, could this 16 say -- would it be permissible in your opinion to add, 17 but less than Marlboro? 18 A No, that wouldn't be right for a couple of 19 reasons. Number one, because Marlboro was a tick --20 just a tick lower. So you couldn't say that. And then, again, I don't know what the right 22 level would be for nitric oxide. I mean, it may very 23 well be that both those cigarettes at 34, whatever 24 that measurement was, or 33, were still perfectly 25 within normal limits or not. But that -- you couldn't 05846 1 say that. 2 Q Could you say, but the same as Marlboro? 3 A No, because that would be a health claim. 4 That would suggest that the Marlboro standard was the 5 correct standard. And I don't think you could say 6 that. 7 Q Could you make any comparative claim at all? 8 A I don't think you can make any comparative 9 claim about a subject like that because it would be a 10 health claim, and I don't think you could substantiate 11 it. 12 Q In talking about PAH and PCAH, I think you 13 acknowledged for Mr. Webb that there was no particular 14 difference in the levels of it but there was some 15 difference in the character or quality of it. I

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16 didn't quite understand that.
17 A Well, I probably didn't explain
it very well,
18 because I think this jury has heard
enough that I am
19 not a scientist. My understanding was
even though the
20 PAH or PCAH levels might be the same in
21 cigarettes that weren't produced pursuant
to the
22 patent process, as the patent process
cigarettes -- as
23 the character activity or the
subcomponents of the
24 PAHs and PCAHs produced by the patented
cigarette were
25 different. And that's why you had the
results in the
05847
 1 skin painting experiments that you did.
Otherwise,
 2 you could have taken -- and this might
have happened.
 3
    If we had vetted this process at
the FTC,
 4 other companies might have come in and
shown that
 5 their own cigarettes, when you experimented
this way,
 6 showed the same kind of tumor reduction as
compared to
 7 the surgeon general's report that ours did.
But that
 8 was yet to be determined. We just knew
that something
 9 was happening for reasons that we thought
were related
10 to the quality or character or activity of
these
11 particular compounds in the smoke
condensate or tar.
12 Q Kind of like flipping a light
switch, you
13 don't know what's going on in the wall,
but you flip
14 it and the light goes on? In this case
the tumors go
15 down when the catalyst is used but nobody
is quite
16 sure why? Is that what you are saying?
17
    MR. WEBB: I would object to the
leading,
18 your Honor.
19 THE COURT: Sustained.
20 THE WITNESS: I was having --
   THE COURT: Excuse me.
21
22
    BY MR. FERGUSON:
23 Q Were you told to stop working on
the XA
24 because of scientific concerns?
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25 A No. 05848

1 Q Did Joe Greer ever tell you that Ernie 2 Pepples threatened him with regard to the XA because 3 he was concerned about the science of the project? MR. WEBB: Objection. Leading. THE COURT: Sustained. BY MR. FERGUSON: 7 Q Did Joe Greer ever tell you whether he 8 discussed the science behind the XA project with Mr. 9 Pepples? 10 A No. 11 Q To what do you attribute the failure of 12 Liggett to market the XA while you were working on the 13 project? 14 MR. WEBB: Objection. Lack of foundation. 15 THE COURT: Sustained. 16 BY MR. FERGUSON: 17 Q Over the course of the years you were working 18 on the XA, how many meetings did you have with people 19 regarding the XA? 20 A Really too many to quantify. A couple of 21 hundred probably. 22 Q And that was the executives at Liggett, the 23 general counsel of Liggett, the scientists who worked 24 on the project? 25 A Well, these were all -- you say meetings, 05849 1 obviously you had no meetings with all of those people 2 involved, but you had meetings with constituents of 3 Liggett from time to time on this project, you know, 4 for a whole host of things over a period of probably 5 three years. So let's just say frequent meetings with 6 parts of those groups that you mentioned from time to 7 time. 8 Q Mr. Webb asked you on crossexamination if it 9 wasn't true that it was Liggett's fault alone that the 10 Epic cigarette never went to market. Do you agree 11 with that? 12 MR. WEBB: Object. Assumes facts 13 evidence. I did not ask that question.

MR. FERGUSON: He did, but I objected to it. 15 THE COURT: He did. And I think the 16 objection was sustained. MR. FERGUSON: It was. I thought 17 it was 18 worth a try, your Honor. 19 BY MR. FERGUSON: 20 Q What is the civil liability that Don Cohn was 21 concerned about that he was describing at the meetings 22 you attended? 23 A Well, the civil liability would be claims 24 against the tobacco industry, and specifically Liggett 25 for the marketing of a dangerous product or the 05850 1 smoking and health issues. 2 Q Did Mr. Greer tell you whether he discussed 3 those legal concerns with counsel for the 4 tobacco companies? MR. WEBB: Objection. Leading. THE COURT: Rephrase it. BY MR. FERGUSON: 8 Q Did Mr. Greer ever tell you he discussed the 9 legal concerns he had with anyone outside of Liggett? 10 A Yes. 11 Q Who did he tell you he had such discussions 12 with? 13 A Well, a number of people. But the only name 14 that I can remember specifically is Mr. Pepples. 15 Q So if I understand you correctly, Mr. Pepples 16 had these discussions with Mr. Greer, and Mr. Greer 17 never told you they discussed the science behind XA? 18 A That's correct. 19 Q But that they discussed the legal liability 20 situation in the industry? 21 MR. McCORMICK: Object to the leading form. 22 THE COURT: Sustained. BY MR. FERGUSON: 23 24 Q You were asked about the licensing of the XA 25 product in Europe, and I believe Mr. Webb's question 05851 1 to you was, wasn't it true that European companies did

2 not want to license the XA because it was not a safer 3 product? And your answer was, I believe, no, I didn't 4 come to understand that. Did you have any understanding of why the 6 European companies were not licensing the XA? 7 A No. 8 Q No? 9 A No. 10 Q Dr. Farone, who I think you have heard 11 referred to, testified in this court, I will ask you 12 to assume, with regard to Philip Morris's 13 denitrification processes. And he characterized 14 Philip Morris's work on those projects while he was 15 there as pyrolysis by analysis. Did you experience 16 any similar thing while you were working on the Epic 17 project at Liggett? 18 A No. 19 Q The project was always moving forward? MR. WEBB: Objection, leading. 21 THE COURT: Sustained. BY MR. FERGUSON: 22 23 Q Was the project always moving forward? 24 A In my opinion, I described it as best I 25 could, as sort of a roller coaster. It wasn't 05852 1 paralysis, it just wasn't heading in the 2 direction. Times when it was very much a go project, 3 and times it wasn't, just as I explained, up and down 4 over the period I was working with the project, until 5 19- -- as we now dated, late in 1979. 6 Q Do you remember Mr. Webb asking you whether 7 it was true that epidemiological testing was the only 8 way to prove the safety of a cigarette? 9 A Yes. 10 Q And do you agree with that? 11 A Well, I suppose in terms of absolute 12 confidence -- I think in one of my memorandums I 13 explained that if palladium were viewed as a drug, and 14 under the FDA act, if you add something to a product

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15 designed for human consumption that is a
drug you
16 might very well subject that device,
product, food,
17 what have you to FDA regulation. And if
you did
18 subject this project to FDA regulation,
then the FDA
19 might say, look, before you market this
XA cigarette
20 you need to establish it is safe in
humans. I could
21 never have taken the test that we had to
the FDA.
   Now, in my memorandum, which is in
evidence,
23 I point out that that is just a lawyer
talking, it may
24 never have happened. But the FDA, for
example, if
25 they had gotten into this project, would
assert that
05853
 1 we needed to have human testing.
 2 Q Is that the same kind of process
that is
 3 engaged in with drug testing before it is
approved by
 4 the FDA?
 5 A Very similar.
 6 Q Human testing is required there,
too?
7 A Yes. I mean, unless it is an
extraordinary
 8 situation where you had a real need for a
drug on the
9 market before you could do in vivo, which
is human
10 testing, that would be true.
11 Q If the XA had come to market in
the United
12 States in 1980, do you know whether we
would now have
13 a sufficient basis for epidemiological
evaluation of
14 the product?
   MR. WEBB: Objection. Lack of
15
foundation.
16
   THE COURT: Sustained.
   BY MR. FERGUSON:
17
18 Q Do you know? I would ask just
yes or no.
19
    THE COURT: Last time you went
beyond yes or
20 no. Just yes or no.
   BY MR. FERGUSON:
21
22 Q Just yes or no.
    THE WITNESS: I don't want to
make a mistake,
24 would you repeat that question.
25 MR. FERGUSON: I don't think I
can.
05854
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That's all I have, your Honor. MR. WEBB: I will be extremely 2 short. 3 RECROSS-EXAMINATION BY MR. WEBB: 5 Q Let me try to be quick, Mr. Meyer. Have you 6 heard the phrase you can't compare apples to oranges, 7 you better compare apples to apples. You have heard 8 that, haven't you? 9 A Sure. 10 Q These charts that we were just showing to the 11 jury showed the XA cigarette to be a 7 milligram 12 cigarette. Do you agree if you are going to try to do 13 a proper comparison of XA as a 7 milligram cigarette 14 that you are going to have to compare it to another 7 15 milligram cigarette in order to get a proper 16 comparison? 17 A In terms of a real tight analysis of the tar 18 component or the byproduct component, that would be 19 correct. 20 Q Well, because you know that cigarettes in 21 this country are advertised, by FTC requirement they 22 list their tar levels, you understand that? 23 A I do. 24 Q And the reason the FTC requires that is 25 because of the belief that consumers learn some 05855 1 information by seeing the tar levels reflected in ads, 2 you understand that? 3 A Yes. 4 Q And you understand that there is a general 5 belief that the lower the cigarette is in tar the 6 better off it may be for you, you understand that, do 7 you not? 8 A I understand that belief. 9 Q So if you are going to -- if -well, this XA 10 product was developed as a 7 milligram cigarette, and 11 if it has ever gotten to market and the ad is going to 12 say 7 milligram, don't you think you ought to compare

13 it to another 7 milligram cigarette instead of a 17 14 milligram cigarette like a Marlboro? 15 A You know, I would have to say to you that I 16 agree with your premise, that you have to compare 17 apples to apples and oranges to oranges. The problem 18 is if I have a cigarette on the market that is a 19 Marlboro and is 17 milligrams, and I am talking about 20 its potential impact on a human smoker, and that is a 21 7 milligram product, a cigarette to cigarette 22 comparison may still be an apple to apple comparison 23 even though they were different, and that's the reason 24 you get a lot of the sort of implied benefits from 25 lower tar. 05856 And then of course you know the debate about 2 whether or not people smoke lower tar cigarettes 3 because they are not getting a sufficient delivery of 4 what they are looking for in a cigarette. So in order to be correct on this, and I am 6 not trying to be argumentative, an apple to apple may 7 be one XA cigarette to one Marlboro. From a chart 8 standpoint it might be something different than that. 9 Q Well, let's try to compare apples to apples 10 on tar on. This chart, Exhibit 3664, if we try to 11 compare apples to apples, just on tar, on this chart 12 that you showed the jury -- if we called the prototype 13 apple A, the closest thing to that, that is a Pall 14 Mall cigarette, we will call that apple B. Do you see 15 that? 16 A Right. 17 Q Pall Mall is actually made by your company, 18 isn't it, Liggett? 19 A I don't think so. 20 Q Well, it doesn't matter. Let's compare --21 does it appear on this chart that Pall Mall 22 Liggett have the same amount of tar?

23 A It looks like that. 24 Q Let's see nitrogen oxide, if we compare 25 apples to apples on the next page. On the next page 05857 1 if we look at the -- if we look at the NO. Do you see 2 the NO there, sir. That is a comparison of these 3 things we have been concerned about. Are you where I am? 5 A I am. I see that. 6 Q All right. I am comparing these nitrogens of 7 oxide of the prototype. Do you see that? 8 A I do. 9 Q With the Pall Mall. Do you see that? 10 A Yes. 11 Q If we compare those two together, the 12 cigarette your client was inventing or going to 13 markets had a much higher level of NO, is that 14 correct? 15 A Compared to the --16 Q Comparing to the Pall Mall. If we are 17 comparing the Pall Mall here, we had a very similar 18 degree of tar, correct? 19 A Yes. prototype XA, the 21 XA is producing a cigarette that has a much higher 22 level of nitrogens of oxide? 23 A That's right. 24 Q My last question, sir, is when you just told 25 the jury that you somewhere had heard that mouse skin 05858 1 is similar to lung tissue? 2 A In the course of the debates twenty years 3 ago, there was a fairly large amount of discussion 4 about the fact that the reason you used these 5 specially bred mice with this super sensitive skin, is 6 that is the closest that the scientists could come 7 with replicating human lung tissue. That's what the 8 Wynder report says. That's what the surgeon general 9 reports says. 10 Q But you are not suggesting to this jury that

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11 either the scientific or public health
community in
12 this country have ever, ever believed
that you could
13 extrapolate data from the mouse test and
apply it to
14 humans, are you?
15 A No, I'm not.
16 Q In fact, let's look at this
document. This
17 document I showed you earlier, it is
Exhibit AS1297.
18 It is a Liggett document.
   Do you see that, sir? Can you
19
see the
20 document?
21 A Yes, I do. I just have to read
it from
22 there.
23 Q I will show it to you. This is
a document I
24 showed you earlier, which is a Liggett
scientist
25 reporting on a skin painting workshop he
attended in
05859
1 1981.
 2 A Right.
 3 Q Let's see what he says right
here. Do you
 4 see where -- this is Dietrich Hoffmann,
the famous
 5 researcher?
 6 A I see that.
 7 Q He spoke there that day. And
he says his
 8 review of tobacco studies was pretty much a
rehash of
 9 previously published material. He
emphasized that
10 human information can come only from
epidemiology.
11 Do you see that?
12 A I see it.
13 Q Do you disagree with that?
14 A Do not.
15 Q And he says we never -- I
emphasize, we never
16 extrapolate from mouse skin to man.
17 Do you see that?
18 A I see that.
19 Q Do you agree with that?
20 A That is certainly what everyone in
the
21 industry, and certainly to the extent
that I was
22 involved, we always believed that to be
the case.
23
   MR. WEBB: Thank you.
   I have no more questions.
25 MR. McCORMICK: Nothing further,
your Honor.
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1 MR. KACZYNSKI: Nothing further,
your Honor.
 2 MR. FERGUSON: Nothing further.
3 (Evening recess.)
05861
1
 2 STATE OF WASHINGTON
 3 COUNTY OF KING
 4 _____
 5
 6
7
            We, James D. Lavielle, RPR, CSR,
Barry Fanning,
8 RPR, Official Court Reporters for the Superior
Court,
9 State of Washington, hereby certify that
the foregoing
10 comprises a full, true and correct
transcription of my
11 stenographic notes taken in the above-
entitled cause.
12
13
14
               Dated this 12th day of
November, 1998.
       OFFICIAL COURT
16
REPORTER
17
18
19
James D. Lavielle,
RPR, CSR
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Barry Fanning, RPR,
CSR
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